# CONCEPT AND MEANING: A CRITERIOLOGICAL ANALYSIS

A Thesis Submitted
In Partial Fulfilment of the Requirements
for the Degree of
**DOCTOR OF PHILOSOPHY**

By

P. R. BHAT

to the
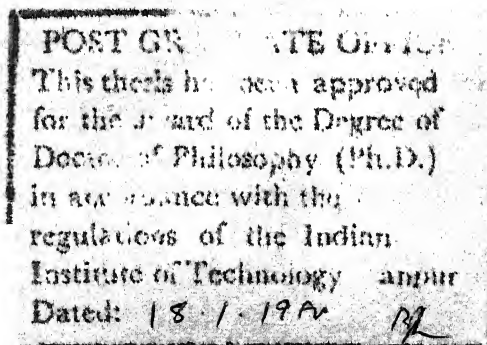
# CERTIFICATE

This is to certify that the thesis "Concept and Meaning: A Criteriological Analysis", submitted by P.R.Bhat in partial fulfilment of the degree of Doctor of Philosophy to the Department of Humanities and Social Sciences, Indian Institute of Technology, Kanpur, is a record of bonafide research work carried out by him under my supervision and guidance. The results embodied in the thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

July  1979

( Rajendra Prasad )

# CERTIFICATE

This is to certify that Mr. P.R.Bhat has satisfactorily completed all the course requirements for the Ph.D. programme in Philosophy. The courses include:
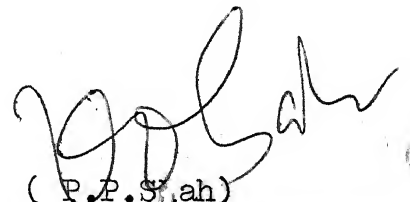
H-Phi. 751 Twentieth Century Philosophy I
H-Phi. 753 Modern Logic
H-Phi. 757 Moral Judgement
H-Phi. 765 20th Century Philosophy II
H-Phi. 769 Indian Philosophy I
H-Phi. 772 Ethical Theories
H-Phi. 773 Wittgenstein II
H-Soc. 732 Sociology of Development

Mr. P.R.Bhat was admitted to the candidacy of the Ph.D. degree in January 1977 after he successfully completed the written and oral qualifying examinations.

( K.N. Sharma )
Head
Department of Humanities &
Social Sciences

( P.P.Shah)
Acting Convener
Departmental Post-Graduate
Committee

# ACKNOWLEDGEMENT

# DESCRIPTIVE CONTENTS

## INTRODUCTION
## CRITERIA: SOME GENERAL CONSIDERATIONS

   Philosophers have been searching for criteria
   of certain basic concepts. Socrates was in
   search of a criterion for the concept 'virtue',
   Plato for 'Justice', Aristotle for 'man',
   Descartes for 'truth', Spinoza and Leibnitz
   for 'matter', Ayer, Schlick and Popper for
   'meaningfulness'.

   The first level of inquiry is concerned with
   the criteria of certain particular concepts.
   The second level of inquiry is concerned with
   the very criteria of any concept whatsoever.

   We need criteria under two circumstances:
   when we want to know which word we can use
   appropriately in a context, or when we want
   to test the appropriateness of the use of
   certain words in certain contexts. A criterion
   can be anything on the basis of which we
   decide whether or not to use a word, or test
   the appropriateness of a given use.

## I

## CRITERIA: SOME RECEIVED ACCOUNTS

(A) Hare: Meaning and Criteria: Hare's
arguments against the necessary relationship
between meaning and criteria are two: first,
one can know the meaning of a word without
knowing its criterion, second, one can know
its criterion without knowing its meaning.
Wrong analyses have lead Hare to wrong
conclusions.
(B) Chihara and Fodor on Symptoms and Criteria:
X is a criterion of Y is not to claim that the
presence, occurence, etc. of X is a sufficient
condition of Y.  Improper analysis of an example
has lead them to a wrong conclusion.
(C) Scriven on Criteria: Where X is a linguistic
expression and C is the observable character-
istic: If X, then $C_1$ or $C_2$ or ... ; if $C_1$ and
$C_2$ and ..., then X. Scriven fails to understand
the logic of criteria.

## II

## CONCEPTS

When we perceive, think about, describe
something, we make use of concepts. When we
want to command, scold or blame someone we need
concepts.  When we request someone to do
something, promises him to do something, praise
him etc., we make use of concepts.

there is restriction or extension in the use
of it.  But, extending the use of a word does
not necessarily mean that there is conceptual
change. When there is conceptual change there
is no change in the cognitive meaning of the
word.  A satisfactory theory must explain
conceptual change.

When two concepts ( or names) are associated
with a word, there is every chance of having
ambiguous sentences. A word will have two
senses when there are two concepts associated
with it.  We will have an ambiguous sentence
where the symptoms of both the concepts
associated with the word are satisfied in a
context.

We extend the use of a word or restrict the
use of a word when conceptual change occurs.
When there is change of concepts one concept
is dissociated from the word and a different
concept is associated with it.

Theories of universals are theories of concepts.
They have the same subject-matter. All
significant questions which can be raised in
the context of concepts can also be raised in
the context of universals.

## III

## CRITERIOLOGICAL THEORY OF CONCEPTS

as they express the same concept. All
linguistic activities one concept can perform
cannot be performed by another concept. No
concept is useless.

Knowledge consists in identifying or in
differentiating. We need criteria to identify
the objects belonging to a concept and
differentiating between objects belonging to
different concepts. A criterion works like
a unit of measurement. A criterion of a
concept may be a criterion of another concept,
but the number of criteria of these two
concepts will be different. There will be
at least one criterion which is not common
to both. A phrase which is constituted of
different concepts will not have its own
criterion; it manages to have one by borrowing
some criteria from some different concepts.
The criteria of a concept determines the
linguistic rules for the meaningful use of
the word which is associated with that concept.

We start a convention by taking something
as a criterion/criteria for a concept.  We
cannot break a convention, but can start a
new convention.

## VI

## CRITERIOLOGICAL LOGIC

# CONCEPT AND MEANING: A CRITERIOLOGICAL ANALYSIS

Almost all genuine philosophical discussions centre around the criteria of some important philosophical concepts belonging to some technical discipline, or even to common sense. They may belong to mathematics, linguistics, etc. or even to philosophy or to any of its different branches like logic, epistemology, metaphysics, ethics, aesthetics etc. Many times a proper understanding of philosophical questions is difficult without the proper understanding of the concepts and their criteria involved. Naturally it would be difficult to answer any philosophical question without being aware of the criteria of the concepts operative in it. An inquiry intended to enable one to be aware of such concepts would be a first level inquiry.

One who realises the importance and role of criteria in language and in philosophical discussions may try to seek knowledge of these criteria themselves. This would lead to a second level inquiry. Most of the portions of this thesis are devoted to second level inquiries.

A proper study of criteria enables us to answer satisfactorily many questions pertaining to concepts and meaning, such as, 'What is the nature of a name?' 'How are sentences meaningful or meaningless, true or false?' 'Why certain statements have some specific logical relationship?', etc. Nevertheless, it also helps us to understand the problems of word-meaning, vagueness, ambiguity etc.

This inquiry, in which we adopt the method of criteriological analysis, concentrates on the nature of criteria, concepts, and names. It uses later on that analysis to explicate the notions of meaning and truth, and some aspects of sentential logic.

We first take up a second level inquiry into the nature of criteria. We seek answers to the following questions: Why do we need a criterion? What is the logic of a criterion? How a criterion is different from a symptom? We end with the conclusion that to have the meaningful use of any word, we need some criteria. A criterion is anything which is taken conventionally as a criterion of a concept being what it is. The relationship between a criterion and its symptoms are contingent. The relationship between a criterion and its concept is necessary.

In the second chapter we raise some conceptual questions like, 'How different conceptual relations are

possible?' 'How concepts can be changed?',etc. A satisfactory theory must be in a position to answer such questions. We then try to examine answers to these questions given by some well known historical theories, and we find them unacceptable.

A theory of concepts is put forth in the third chapter. We find that there are three factors involved in a concept: form, content and accidental features. An inquiry into the content of a concept will take us to a first level inquiry, and not to that of a concept as merely a concept. An inquiry into accidental features will not help us in understanding the general behaviour of a concept. A proper understanding of a concept is possible largely by understanding the form. The form of concepts gives us the minimum conditions that are necessary to have a concept. We find that the form of concepts is nothing but the criteria which are conventionally chosen to group some objects together to facilitate one's understanding of those objects. We substantiate further that this theory is able to answer the questions we have raised earlier.

An attempt in the forth chapter is made then to analyse the behaviour of names. We have tried to discuss such questions as whether names have any criterion, in any sense, and whether they have any meaning. We end up with the conclusion that without criteria names cannot be names

and the meaning of names are determined by the criteria
they have.

In the fifth chapter some questions relating to the
functioning of sentences have been raised. How a sentence-
meaning is possible? What makes a sentence meaningless? How
are figurative uses of words, even if literally meaningless,
operative in meaningful sentences? When do we call a sentence
true or false? Why certain sentences are necessary? Answers
to these questions have been attempted with the help of
criteriological relationships which the involved concepts
and names may have in the context of a sentence.

Lastly, in the sixth chapter with the help of the
theory of truth and the theory of meaning, yielded by the
study, we have tried to develop a theory of logic. We find
that underlying every valid argument there are some criterio-
logical relationships of the concepts involved. We also find
that it is possible to derive all logical rules from criteria.
The possibility of giving a new interpretation to logic, based
on words rather than on statements or propositions, seems to
be worth exploring.

# INTRODUCTION

## CRITERIA: SOME GENERAL CONSIDERATIONS

1. Historical Background:

From the time of Socrates to the present philosophers have endeavoured to search for the criteria of different basic concepts of philosophy. Socrates was in search of a criterion for the concept 'virtue' and he formulated it as the knowledge of the good. Plato makes a search for the appropriate criterion for the concept of 'justice' in his <u>Republic</u>. Aristotle was in search of a defining criterion for the concept of 'man' and he found it in 'rationality'. Descartes gives the criterion for 'truth' as that which we conceive clearly and very distinctly. Criterion for 'reality' is 'one which is self-existent' for Descartes. The criterion for the concept of 'matter' is 'the one which has extension' for Descartes, 'the one which has extension and thought' for Spinoza, and perhaps for Leibnitz it is 'the one which is self-active,' as he rejects extension as one of the essential characteristics of monads. Logical Positivists were in search of a criterion for 'meaningfulness' of empirical statements. The criterion is verifiability in principle for Ayer, confirmability for Schlick and falsifiability for Popper.

Important philosophical works have been written as a result of this search for criteria of crucial concepts. If some works concentrate on the concepts of virtue, good,

happiness, pleasure, justice, freedom, duty etc., some others
concentrate on these of knowledge, reality, truth, meaning,
space, time, mind, body, universals, particulars, god, soul
etc. etc. Philosophical questions like 'What is reality?',
'Who is a virtuous man?', 'What makes a statement true?',
'What makes an argument valid?', 'Who is a free man?,' etc.
demand criteria to distinguish one concept from another, e.g.
'real' from 'unreal,' 'virtuous' from 'wicked,' 'true' from
'false,' 'valid' from 'invalid,' 'free' from 'bound' etc.
There are some other philosophical questions, though they are
not directly questions regarding criteria, which presuppose
the criteria for certain concepts;  they arise only when we
have certain criteria for the use of certain concepts.
Metaphysical questions, many of them belong to this category;
e.g. 'How are mind and body related?' 'How are universals and
particulars related?' etc.  These metaphysical questions can
be meaningfully asked only when we have some criteria for the
concepts 'mind' and 'body,' 'universals' and 'particulars,'
etc. If we do not have some definite criteria for applying
these concepts to certain instances of them, we cannot ask
the questions in a meaningful way.

2. Two Levels of Inquiry:

There are two levels of inquiry possible here.(1). a
first-order inquiry into the criteria of concepts like,

reality, virtue, truth, good, validity, mind etc., and (2). a second-order inquiry concerning the very nature of criteria of any concept whatsoever. If I conduct an inquiry into the criteria of the concept 'good,' this is a first level inquiry, but instead if I conduct an inquiry into what does it mean to regard something as a criterion of a concept, it will be an inquiry into the very nature of criteria, and therefore a second level inquiry.

How are we to distinguish a true statement from a false one? Correspondence theory offers the criterion according to which if a statement corresponds to a fact then it is true, and if it does not, then it is false. Coherence theory offers a different criterion. If a statement is coherent with other statements then it is true, and if it is not, then it is false. Pragmatic theory offers still another criterion. If it is useful to believe in a statement, then it is true, otherwise, it is false. When we ask such questions as 'Is the list of criteria offered by a theory self-sufficient?,' 'Are the criteria offered really applicable to the concepts 'true' and 'false?,' it will lead us to a second level inquiry.

The need for criteria arises not only with reference to such philosophical concepts as 'meaningful' and 'meaningless,' 'true' and 'false' etc., but also for the concepts which belong to normal life as, 'colour,' 'taste,' 'sound' etc. I cannot

say that something which I have experienced is a colour, a taste, or a sound unless I have a set of criteria which distinguishes a colour from a taste, and a taste from a sound.

3. Criteria: Some General Remarks:

Under two circumstances we feel the need of criteria: First, where we have more than one name, concept, phrase, or sentence, in our mind and we want to use the appropriate one. I know the stations that I will be crossing on my way to Hyderabad. I do not speak the language that other passangers speak, and I do not have any time-table of Indian Railways with me. I have just woke up and want to know how far is Hyderabad from the station where the train is standing, by knowing which station it is. I have a list of names with me; eventhen I am facing the problem to use the appropriate name. A teacher has to asses a student and grade him as excellent, good, satisfactory, unsatisfactory. He needs a criterion. You have gone to purchase a piece of cloth. The shop keeper shows the cloth to you. You want to have a durable cloth as well as one of your choice. You do not believe in what the shop keeper says. You want to test whether that piece of cloth belongs to an old stock or to a new stock before purchasing it. You have two phrases 'an old stock' and 'a new stock' and you need a criterion to find out which phrase should be appropriately used in describing the piece of cloth.

You go to a fruit shop. You are inclined to purchase some mangoes as the price is very reasonable. The shop keeper says that they are good mangoes. You want to know whether to use the sentence "These are good mangoes" or "These are bad mangoes" in order to describe them properly. You want to have a criterion to use one of these sentences which is appropriate and true of those mangoes.

Second, where we want to test whether someone has made the use of a name, concept, phrase, or sentence, correctly. For example, the police wants to test whether the thief has given his own name or somebody else's name as his. Here it wants to have a criterion for testing the use of a name. When you want to test the claim of a shop keeper that a particular cloth is of hundred percent 'woolen', you need a criterion to test the use of the concept 'woolen'. You want to know whether a candidate has truely claimed himself to be 'a first class student'. You need a criterion to know whether the student has properly used the phrase 'a first class student'. You want to test the truthfulness of the claim of a scientist "There is a possibility of human existence on Mars."

A criterion may be said to be a basis on which we decide which name, concept, phrase, sentence is correct to use in a context. Or it is a test to find out how far the use of a name, concept, phrase, sentence is correct in a context. We

do not need different criteria to decide whether we can use an
expression appropriately in a context, and to test the
appropriateness of the use of the expression in the same or
different context. If a speaker claims that a student is first
class by looking into his degree certificate, the hearer can
test the validity of his claim by looking into the same degree
certificate.

## 4. Criteria and Names:

How do we manage to refer to only one thing successfully?
When we describe something, we do the opposite of identification.
We do not want to seek a difference which an object has in
comparison to other objects. When we want to identify an
object, we want to seek a unique feature of that object which
is not present in other objects. But when we describe, we want
to seek generality in that object. We try to see in a particular
object in how many different groups we can put that object, say,
in the groups of 'red objects', in the group of 'fruits', etc.
When we fail to put an object in a group, but if it is true
of only one object, then that turns out to be a definite
description of that object which helps us to identify that
object. How can we identify an object with the help of a
proper name? This is possible because proper names refer to
things uniquely, and they can be identified if we know the
criteria for those names. We also succeed to refer to only

one thing, because we have some criteria for a name which are not of any other name.

Has a name a meaning? If it has, what constitutes the meaning of a name? How a logically proper name, "this," "that", is possible? Logically proper names have no sense or meaning, as we use the same logically proper names to refer to different objects in same contexts and different contexts. Answers to these questions, I believe, can be sought with the help of criteria for names.

## 5. Criteria and Concepts:

What is common to all objects belonging to a concept? Wittgenstein has shown that there is nothing which is common to all games other than the family resemblances. Then, how different objects which have nothing in common belong to a concept? I believe, if we have an understanding of the criteria of a concept, we will be in a position to show how different objects having nothing in common can belong to a concept.

How one concept can be defined in terms of other concepts? For example, 'triangle', is defined as a figure bounded by three straight lines. How genus-species conceptual relationship is possible amongst different concepts, for example, 'colour' with 'red,' 'blue,' 'green,' 'yellow' etc.? How a pair of concepts be opposite concepts, for example,

'kind' and 'cruel', 'good' and 'bad', 'intelligent' and 'dull' etc.? Why a group of concepts is incompatible, for example, 'red,' 'green,' 'yellow,' 'white,' etc.? Why do we commit a category mistake if we think that an instance of one concept to be an instance of some other concept, for example, a table to be a square root? Why two words which express the same concept are called synonymous, for example, 'occulist' and 'eye doctor'? Answers to these questions, I believe, can be found by finding out the different criteria of these different concepts which have different conceptual relations, by finding out the criterial relations which these criteria of different concepts have.

Is conceptual change possible? How can we restrict or extend the use of a concept? What is the difference between conceptual change and change of concepts? How can we differentiate conceptual change and change of concepts from a construction of a new concept? Answers to these questions can be sought by observing how criteria of a concept change and how they are newly formulated.

6. Criteria and Sentences:

Phrases and sentences are constituted of words. Words express names and concepts (except a few words which express the rules of grammar which one may treat to be names of grammatical rules). How can we form countless number of

meaningful phrases and sentences out of a limited number of words? Why certain phrases, sentences, are meaningful and others meaningless? How a phrase, a sentence, which is literally meaningless, can be metaphorically or figuratively meaningful? By knowing the criteria and symptoms of the names and the concepts which constitute them, we can find out answers to these questions. The way a criterion of a name is related to a concept, and a concept with another concept will bring out all possible meaningful phrases, sentences, that one can construct with the use of them. And, the criteria of these words also put a boundary for meaningful phrases, sentences, that one can have. A metaphorical phrase or sentence has no literal meaning as it belongs to a different category, but it has metaphorical meaning as both the names and concepts satisfy the criteria of a different concept which is not their genus concept.

How analytical statements are possible? Why certain statements are contingent? Answers to these questions can also be sought by knowing the criteria of names/and concepts that constitute the sentences. We can also find out under what circumstances a statement is true or false. Moreover, why certain questions are nonsensical, or irrelevant? Why certain commands cannot be issued to certain persons or things?, etc., also can be sorted out by considering the criteria of the

words that constitute the sentences which express them.

## 7. Criteria and Logic:

Why different statements have certain logical relationships? How can we find out certain rules and valid forms of logic? Answers to these questions can be sort out by examining different names and concepts that occur in different statements in different orders and finding out the logical relationships which they have. And, further, we can also find out the rules and valid forms of arguments based on the analysis of criterial relationships.

## 8. Criteria and Linguistic Rules:

If names, concepts, phrases or sentences are used according to their criteria then, they are used correctly. But, we do not use them always correctly; eventhen one may say that one has used them according to the Linguistic Rules, for a wrong use also is meaningful some times. For example, instead of calling someone by his name, I call him by some other name by mistake or voluntarily. I call an 'intelligent' boy a 'dull' boy by mistake or voluntarily. These sentences will not be meaningless. That is to say, even a use which is not according to criteria also can be a use. In this broad sense of the term 'use,' a wrong use which is not according to criteria is also a use if it is not committing

a category mistake. Any symptom of any criterion of a name or a concept can also be sufficient ground to use a name, a concept, a phrase or a sentence. We make the hypothesis of the existence of one or the other criterion of a name, concept, phrase, or sentence to be present on the basis of certain symptoms. Thus a name, a concept, a phrase, a sentence will have a use according to the hypothised criterion.

## 9. Criteria and Regularity:

We use the words in a certain way. The words 'valid,' 'truth,' 'force,' 'law,' etc. have been used systematically for centuries. The use of these words hardly changes. This happens because their criteria also do not change. When we do not change the criteria, there is no scope for validly changing the use of words. But there are some words where uses change quite often in comparison with those of some other words which change rarely. For example, the uses of 'obligation', 'rights of a citizen,' 'culture' etc. change quite often in comparison with 'valid,' 'truth,' 'law' etc. Regularity in the use of a name, concept, phrase, or sentence, we can maintain only when we maintain regularity in using the criteria concerned. Even those words which change, they maintain some regularity.

## 10. Criteria and Consistency:

We can talk of 'consistency' only when we have systematic use of names, concepts, phrases, and sentences. Use of a name

can be inconsistent. A criminal, many times to hide his identity assumes different names, and when an advocate cross examines him, it is found that the accused has used different names in a very inconsistent way. It can be said that the use of a concept is inconsistent, if one says "X is good" and of Y which is in no significant way different from X that Y is not good. Here he is making an inconsistent use of the concept 'good'. Similarly, uses of a phrase can be said to be inconsistent. A sentence can be inconsistent internally for example, when a man makes a self-contradictory statement. What is asserted in one part of the sentence, if it is denied in the other part of the sentence, then the sentence can be said to be internally self-contradictory. If what we assert in a statement is denied in another statement, then both the statements taken together will be contradictory.

To say that there is inconsistency, we have to presuppose the systematic use of criteria of names and concepts. If names and concepts have systematic use then one can talk of a pair of consistent and inconsistent phrases, sentences, as they are constituted of only names/and concepts. Inconsistent use of a phrase is possible only when we use the names and concepts which constitute the phrase unsystematically. For example, when the phrase 'an old man' is used to address to old people, youths, and children, then there is no systematic

use of the phrase. It will have a systematic use only if we use it always (it does not mean even when we change the concept also) to refer to old people. Similarly, a pair of contradictory statements can be had only if we unsystematically use the names and concepts which constitute the two sentences. For example, "X is married and X is unmarried" is a pair of contradictory statements where 'X' is a name of only one man and 'married' and 'unmarried' are opposite concepts. A pair of opposite concepts cannot have the same object as their instances at the same time. But these two sentences "X is married" and "X is unmarried" are used to describe the same object at the same time, and therefore cannot succeed to describe that object, for the reason that the statement "X is married" claims that the man named 'X' satisfies a criterion of the concept 'married' and the second sentence "X is unmarried" claims that X satisfies a criterion of the concept 'unmarried'. But as the concepts 'married' and 'unmarried' cannot be attributed to the same object at the same time, i.e. one and the same object at the same time cannot satisfy the criteria of each of the two opposite concepts, the statements are contradictory.

If a word has no systematic use, that means that the word does not express a name or a concept, for if it expresses a name or a concept, then it will have some criteria or the other for the use of that word according to those criteria, and

to test their use. To say that a word has no use is to say that it expresses no name or concept and hence is meaningless.

We can talk of inconsistent uses of a name, a concept, a phrase, a sentence only when we have use for them, i.e. they have meaning (because of their criteria). Even to talk of inconsistent use of them, we must have to presuppose their having meaning. Any word which has no meaning cannot be used inconsistently. Any word which does not express any name or concept cannot be used inconsistently. When we use words inconsistently what we do is to use words which have systematic use unsystematically.

To have consistency, we need words which have meaning and regularity in their use. We can have regularity in the use of the words only when they have rules. We call some uses inconsistent if they are not according to the adopted criteria. Therefore, it is correct to say that consistency and inconsistency, or consistent and inconsistent uses of a name, a concept, a phrase, or a sentence, are possible because of their criteria.

## 11. Criteria and Learning:

We learn the use of words and sentences along with the grammar of a language. Words express names or concepts; but in the context of a sentence certain words indicate the rules

of grammar. We need names and concepts to express our thoughts,
feelings etc. in sentences in accordance with the grammar of
the language. When someone is taught a word, he will be given
a list of criteria stating under what circumstances one can
use those words appropriately, and he will be given an
equivalent word from another language if he knows that language.
When we introduce someone present, we simply say that "He is
so-and-so" by giving his name, and it is up to the listener
to observe him and formulate criteria, or we sometimes give
some criteria by giving the definite descriptions of that man
and leave the listener to talk to him and find out the remaining
criteria for his name if he is interested. But when we introduce
someone in his absence to someone else, we must have to give at
least one criterion so that the person can identify that man.
When we teach a concept, we give a list of criteria specifying
under what circumstances one can use the word correctly, or
we give an equivalent word in some other language which is
associated with the same concept which this word expresses, and
the listener will understand under what circumstances that word
has to be used in accordance with the grammar of that language,
as he knows the concept and its criteria.

12. Criteria and Translatability:

When we translate a word into one of another language
we translate it on the basis of the concept which the two

express.  A correct translation is one where both the words have the same use because of their association with the same concept having the same or similar criteria.  When we translate a sentence into another language, we translate the words first and then put them in the grammatical form of the respective language.  There is no need of translation of names, as the same word in one language is accepted in another language also.

13. Criteria and Success in Communication:

Communication gap is very common in our day to day life when we fail to catch what the speaker is expressing.  This happens, when we fail to understand according to which criteria, the speaker is using certain words in a context where different criteria of different names or concepts are or can be used. We fail also when the speaker uses ambiguous words which express two or more names or concepts.  The criteria of two names or two concepts associated with the ambiguous word are different, and we fail to understand according to which criterion one is making use of the words in a context where both the names or concepts can be used according to their criteria.

14. Criteria and Manipulability:

The one who knows all the criteria of different words will be able to use those words very skilfully in appropriate contexts.  Only a man who knows the criteria of these concepts

can select one instead of the other in a context, for example,
out of 'studious' and 'hard working,' 'kind' and 'sympathetic,'
'friendly' and 'diplomatic,' 'decent' and 'nice,' 'rich' and
'wealthy,' 'under developed' and 'developing' etc. Clear
understanding of criteria will be clear understanding of
different uses of different words in different contexts. With
efforts, one can have clear understanding of the concepts by
knowing their criteria and develop a sensitivity towards the
use of the words which are associated with them. One who
knows all the criteria and symptoms of a concept will also
know where to extend or restrict the use of a word. He can also
know where one fails to extend the use of the word, and still
if one does that he gives rise to two senses of a word by
associating a new concept to the same word, and thus leading to
an ambiguous word. One who wants to restrict the use of a
word without constructing a new concept must know all the
criteria of that concept clearly.

15. One Versus Two Senses of Criteria:

In the context of names, the criteria of a name are
the definite descriptions of the object named. If you know
the definite descriptions of an object, then you know which
name is to be used in describing, questioning, etc. regarding
some aspects of that object. And similarly, if you know
criteria for a name, then you can very well testify whether

the use of a name is appropriate in a given context. For example, if you know that 'one who is the first Prime Minister of India' is a criterion for the name 'Jawahar', then you can use this name instead of the criterion in the sentence "Indira is the daughter of the first Prime Minister of India". And a hearer who knows the criterion of the name 'Jawahar' can testify whether the use of the name is appropriate in the sentence "Indira is the daughter of Jawahar" by testifying whether or not she was the daughter of the first Prime Minister of India.

In the context of concepts, the criteria of a concept is generic in nature. A criterion of a concept can be used to test many objects to find out whether the use of the word is appropriate by testifying whether they satisfy the criterion. And a concept has many uses in the sense that the same criterion can be used to test whether different objects belong to a concept. The same concept can be used as a predicate concept of many subject-predicate sentences where we might make use of the same criterion in using the same concept as predicate concept or we might make use of different criteria of the same concept for that purpose. For example, the concept 'dead man' has many criteria like 'one whose heart beating has stopped for a considerable time', 'one whose body temperature is below $70^{\circ}C$,' etc. which are only the two among many. We can use either of

the criteria to verify whether one is dead, and accordingly
we may or may not describe him as 'dead'.  Or we can make use
of all the criteria of the concept and declare a man to be
dead.  As every criterion has the capacity to test different
objects whether they belong to the concept, it can be said to
be generic in nature.

A criterion of a name is applicable to only one object,
whereas, one of a concept is applicable to many objects.  For
this reason a criterion of a name is not generic in nature
but, a criterion of a concept is always so.  A criterion for
a name cannot be a criterion for another name, as a definite
description of an object cannot be definite description of
another object.  But, a criterion of a concept can be a
criterion of another concept.  For example, all the criteria of
the species concepts are the criteria of a genus concept. All
the criteria of 'red,' 'yellow,' 'green' etc. are criteria of
the concept 'colour'. Two questions are but natural in this
context:(1) Are we using the term 'criterion' in the same sense
when we talk of a criterion in a context of a name, and in a
context of a concept? (2) .Can we talk of criteria in the context
of names as they are not generic in nature?

Let us ask when do we need a criterion.  We do when
we want to use a name, a concept, a phrase, a sentence
appropriately in a context, or when we want to test the

appropriateness or inappropriateness of a use of a name, a concept, a phrase, a sentence. A criterion is always a criterion for a linguistic expression[1] We do not need criteria if we do not want to use a name, a concept, a phrase or a sentence or to testify their use. That is to say, a criterion is to be recognized only if it serves some linguistic purpose; the purpose of providing linguistic rules for linguistic expressions, or to test the appropriateness of the use of a linguistic expression. A criterion has only a functional importance.

The concept 'criterion' has two characteristics: 'one on the basis of which we can determine the appropriate use of a linguistic expression' and 'one on the basis of which we can test the appropriateness or inappropriateness of the use of a linguistic expression'. Are they independent? If one knows the concept of 'line' and one wants to have a criterion of 'straight line', one can give a criterion for the use of the concept by stating 'one which is the shortest distance between two points', and one might adopt a different criterion in testing the use of the concept by finding out whether a line is curved or not and thus he can provide another criterion by

---

1. Wellman, C. : 'Wittgenstein's Conception of a Criterion,' The Philosophical Review, Vol. LXXI, 1962, p.434.

the way of testing the use of the concept like this: 'one which is not a curved line'. But these two criteria are not independent criteria for finding out a criterion of a concept. If a concept has only one criterion, which is a defining criterion, then also these two criteria of the concept 'criterion' are not independent, for example the concept 'T.B.'has only one criterion namely, 'a disease caused by tuberculous bacillus'. In this case you have to adopt the same criterion to use the concept 'T.B.' in a certain context appropriately and also to test the appropriateness of the use of the concept.

When the criteria of a concept are independent, I cannot adopt one criterion to use the concept and another criterion to test the appropriateness of the use. If X and Y are the two criteria of the concept C, then if I use the criterion X in a context and make use of the concept C, then my friend cannot make use of Y in order to test whether I have used the concept appropriately. It is not necessary in that context that the criterion Y of the same concept C is also satisfied. It will be a mistake if my friend tests whether the criterion Y is satisfied and declares that my use of the concept C is inappropriate without testing X also. To find out whether a use of a concept is appropriate, one must have to test all the criteria of the concept. Similarly, in a context if one

criterion of a concept is not satisfied, then one cannot conclude that we cannot use the concept appropriately unless we have tried all the criteria of the concept. A criterion of a concept '...' should not be confused with either one of the two criteria of the concept 'criterion'. Suppose X is a criterion for the concept C, then there are two ways of finding out whether X is a criterion. The one is that you observe that someone is using the concept C according to X. The second is that you observe that someone else is adopting a method to test the use of the concept C with the help of X. Therefore, the criterion of the concept C is one and the same i.e. X, but to test whether X is a 'criterion' one can adopt two methods as suggested above which constitute two criteria of the concept 'criterion'. One or two observations of using X as a criterion for C may not be sufficient, but it cannot be the case that everyone in most of the time uses X as a criterion but X is not a criterion for C. In the case of the concept 'straight line' we have adopted two criteria of the concept 'criterion' to identify one criterion of the concept 'straight line' i.e. 'the shortest distance between two points'.

Consider whether 'the one which is generic in nature' is also a criterion for the concept 'criterion'. Can we say that anything that is generic is a criterion? It does not seem to be necessarily a criterion for one or another concept

at all, if something is generic in nature. For example, 'anything that is being' does not seem to be a criterion for any concept. Any phrase which involves a concept which is not a species of any other concept cannot be a criterion for any concept. Such concepts can form a criterion only when there is a concept which borrows some criterion from other concepts, e.g. 'good pen', in this example, even if 'good' has no genus concept, it can be used to express a criterion of the concept 'good pen'. This is not to which I am referring to.

Suppose we say that anything that is generic can only be a criterion. What does this imply is that a definite description cannot be criterion for a name, for it is not generic. Either something else is a criterion for a name other than definite descriptions, or we do not need criteria for names. Let us consider the *second* possibility of not needing a criterion for a name. If a name has no criterion, then it has no use, nor if it is used, its use can be tested. If I call 'X' as 'Y', nobody can question me, for he has no criterion to test whether I have made the right use of a name. This is against facts. There is always the possibility of testing a use of a name. Two names have different uses. Where I can use one name appropriately, not necessarily I can use another name also appropriately. If I say "X is my brother"

it might not hold good with any other name at all if I have
only one brother who is named 'X'. Therefore, a name has
some use, and it does not have some other use; and use of a
name is determined by the rules, and the rules are determined
by the criteria of a name.

I do not see any need for the search of some other
criteria which are not definite descriptions when definite
descriptions can serve the purpose of criteria for names. For
example, the name 'Jawahar' has many criteria among which are
'one who is the first Prime Minister of India' and 'one who
is the son of Moti Lal'. If you want to use the name 'Jawahar'
in order to refer to him, then check whether you can use 'one
who is the first Prime Minister of India' or 'one who is the
son of Moti Lal' or any other definite description of the
person named 'Jawahar'. If you can use the definite descriptions
'one who is the first Prime Minister of India' or 'one who is
the son of Moti Lal', you can also use the name 'Jawahar'
instead of these definite descriptions. And further, if you
want to test whether someone has used the name 'Jawahar'
appropriately, you can test it by checking whether the person
satisfies at least one of the definite descriptions of the
person named 'Jawahar'; if so, it is an appropriate use,
otherwise it is inappropriate. Unlike criteria of concepts,
it is enough if the use of a name satisfies at least one

criterion, for all definite descriptions of one object refer
to only one thing.

Though the difference in the generality of a criterion
of a name and that of a concept prevails, this is not a relevant
difference which makes them different so far as their role as
criteria are concerned. Anything that has generality does not
serve as a criterion, and anything that does not have the
generality is not forbidden from performing the function of
a criterion. A criterion of a name and that of a concept
have only one sense, i.e. 'one on the basis of which a person
decides the appropriate use of an expression'.

## 16. Symptom – Criteria Distinction:

Phrases and sentences are constituted of names/and
concepts. Criteria of a phrase or a sentence, therefore, are
constituted by the criteria of names/and concepts that
constitute a phrase or a sentence. For example, the phrase
'an old man' is constituted of two concepts 'old' and 'man'.
Anything that is old need not be a man; and any man need not
be old. 'Old' and 'man' have criteria to use them as predicate
concepts in many contexts. Out of all the objects which
satisfy a criterion of the concept 'old'; only some of them
satisfy a criterion of the concept 'man', and vice versa. By
making use of these two concepts 'old' and 'man' I can have a
third concept i.e. 'old man'. If 'old' and 'man' have only

one criterion each, say, X and Y, then the criterion of the
concept 'old man' will be 'one which is X as well as Y'.
Suppose if the concepts 'old' and 'man' have two criteria
each, say, A, B and C, D; then any one from each group will
form a criterion of the concept 'old man,' and so on.

A criterion for a name-concept sentence, for example,
"X is an intelligent boy" can be derived from the criteria of
'intelligent' and 'boy'. One has to first have the criteria
for the concept 'intelligent boy' by deriving it from the two
concepts 'intelligent' and 'boy'; and then we have to find out
the criteria of the name 'X', and identify the object and find
out whether the object satisfies the criterion of 'intelligent
boy'. If it does, then the use of the sentence is appropriate,
hence true, otherwise it is false. A criterion for a concept-
concept sentence, for example, "Mangoes are fruits" can be
easily found out if we know the criteria of concept 'mango'
and 'fruit'. If there can be a single mango which we do not
call 'fruit', then the sentence is inappropriate and hence
false. If there cannot be a mango which we do not call 'fruit',
then the sentence is appropriate, hence true. We need not
have to test each mango to come to this conclusion whether
mangoes are fruits; that is practically impossible. We find
out whether such a use of a sentence is appropriate or not by
considering the criteria of both the concepts. If every

criterion of the concept 'mango' is a criterion of the concept 'fruit' what ensures us is that whichever object satisfies a criterion of the concept 'mango' will be satisfying a criterion of the concept 'fruit'; hence there cannot be a case where a mango is not a fruit. If all the criteria of the concept 'mango' are not criteria of the concept 'fruit', there is always a possibility of an object satisfying a criterion of 'mango' but not of 'fruit'. In such cases we say the use of the sentence is inappropriate, and hence false.

(A) Characteristics of a Criterion:

(i) A criterion is sufficient, but not necessary:

It is in the logic of a criterion that if we can apply a criterion to some object, then we can apply the name or concept to that object.[2] But a name or a concept may have more than one criterion. In that case a single criterion of a name, or a concept, if it is satisfied, will be sufficient to sanction the use of the name, or concept in that context; we would not need other criteria of the name or a concept to be satisfied. For example, where 'Jawahar' is a name, 'one who is the first Prime Minister of India' and 'one who is the son

---

2. Canfield, J.V. : 'Criteria and Rules of Language,' The Philosophical Review, Vol. LXXXIII, 1974, p.73.

of Moti Lal' are criteria for the name, then wherever we can use one of these criteria appropriately, we can use the name 'Jawahar' appropriately. If "One who is the first Prime Minister of India died in 1964" is an appropriate sentence, then "Jawahar died in 1964" must also be an appropriate sentence. I do not need to find out whether "One who is the son of Moti Lal died in 1964" is also an appropriate sentence before using the sentence "Jawahar died in 1964". I can try with any one of the criteria of the name 'Jawahar', I do not need to try with every criterion of the name; a criterion can be said to be sufficient in the context of names.

Moreover, if I know the two criteria of the name 'Jawahar' and if someone said "Jawahar died in 1964", I can test the appropriateness of the use of this sentence by testing either 'one who is the first Prime Minister of India' died or 'one who is the son of Moti Lal' died. If someone gave me a teligram stating "One who is the son of Moti Lal died", it will be a sufficient ground for my belief that Jawahar died.

In the context of a concept also we can say that a criterion is sufficient, but not necessary. For example, where the concept 'dead human body' has 'one whose heart beating has stopped for a considerable time' and 'one whose temperature is below $70^{\circ}C$' as its criteria, then if one of these criteria is found to be satisfied by a human body, we

can say that that is a dead human body.  Moreover, if somebody claims that someone is dead, I need to test only one criterion as all the criteria of the concept 'dead human body' are not independent criteria, and then conclude that the person has claimed rightly.  If a concept has two independent criteria then in order to test whether the concept has been used appropriately, one has to test whether any one of the criterion is satisfied, and therefore we cannot conclude that the use is not appropriate by testing one of the criteria of the concept.

(ii) Criterial relation is logical:

A relationship between a name, a concept and their criteria is logical; it is not grounded in experience. We have a necessary relationship between a name, a concept and their criteria.  Whenever a criterion is satisfied we can use the corresponding name or concept as the case may be, without any hesitation.  This applicability of a name, or concept, where the criteria are satisfied is not derived from experience. I do not, for example, observe a number of cases where 'one who is the first Prime Minister of India' is satisfied to decide whether the name 'Jawahar' can be used.  Or I do not observe  first whether I can check correctly by making use of a definite description whether one has made a right use of the name.

Similarly in the context of concepts, we do not make the generalized statement on the basis of observation that "Whenever the temperature of a human body goes below $70^{\circ}$C, he is found dead," instead, even if one has not observed a single instance of this sort, he can conclude a man is dead if his body temperature is below $70^{\circ}$C. And if I want to test whether someone has used a concept properly, I do not decide whether something is a criterion based on my repeated observation that the use of a concept is inappropriate whenever a criterion of it is not satisfied. In fact I cannot come to such a conclusion on the basis of my experience for, if a concept has two independent criteria, and if one criterion is not satisfied, I cannot declare that the use of a concept is wrong, for, the concept might have been used according to the other criterion. A conclusive test whether a concept has been used properly or not can be had only when we try to test whether at least one of the criteria of that concept is satisfied. If none is satisfied only then I can declare the use of the concept inappropriate. For example, the concept 'colour' has many criteria, 'one which is red,' 'one which is green,' 'one which is yellow,' 'one which is blue' etc. If I want to test whether someone has made use of the concept 'colour' properly in a statement "X is coloured", it is not sufficient if, I just test whether it is 'red'. It is not

enough if I just test whether it is 'yellow'. If I find that
X is neither red, nor yellow, I cannot declare that the use
of the concept 'colour' is incorrect; for one might have used
the concept according to the criterion 'one which is green'.
Only when I am confirmed that X does not satisfy any criterion
of 'colour', i.e. it is not 'red,' 'yellow,' 'green,' 'blue'
etc. etc. then, I can declare the use of the concept 'colour'
is inappropriate.  Moreover, my knowledge that the use of the
concept 'colour' is inappropriate when none of its criteria
is satisfied is not based on my repeated experience.

If X is a criterion for a name 'P', then the sentence
"X, therefore P" is true.  If the name 'P' has only one
criterion, which is the defining criterion, then to say
"X, but not P" or "P, but not X" is to make a self-contradictory
statement, for in that case the meaning of the name 'P' is
constituted by the only criterion X; and we will be contradicting
in the second part of the sentence what we are asserting in the
first part of the sentence. For example, if 'A' is a geometrical
figure whose only criterion is 'the point at the intersection
of the straight lines BC and DE' then to say "The point at
the intersection of the straight lines BC and DE is not A"
or "This is A, but not the point at the intersection of the
straight lines BC and DE" is to make a self-contradictory
statement.  Whereas, if the name 'Jawahar' has 'one who is

the first Prime Minister of India' and 'one who is the son
of Moti Lal' as its criteria, then to say "This gentleman
is one who is the first Prime Minister of India, but not
Jawahar" or "He is Jawahar, but not the first Prime Minister
of India" is not to make a self-contradictory statement as
the meaning of the name 'Jawahar' is constituted by two or
more criteria, i.e. 'one who is the first Prime Minister of
India' and 'one who is the son of Moti Lal'.  If a criterion
of a name is denied of that name, where there are more than
one criterion for that name, the sentence will be false, but
not self-contradictory and hence meaningless.

Similarly, if 'Y' is a defining criterion for the
concept 'C', then "Y, therefore C" is a necessarily true
statement.  If 'Y' is the only criterion for the concept 'C',
then to say "Y, but not C" or "C, but not Y" is to make a
self-contradictory statement. For example, if the concept
'T.B.' has only one criterion 'a disease caused by the
tuberculous bacillus', then to say "A disease caused by the
tuberculous bacillus is not T.B." or "T.B. is not a disease
caused by the tuberculous bacillus" is to make a self-
contradictory statement, for the meaning of the concept
'T.B.' is constituted by the only criterion 'a disease caused
by tuberculous bacillus," and we will be contradicting in
the second part of the sentence what we are asserting in the

first part. If the concept 'C' has more than one criterion,
then to say                          "C, but not Y" is not to make a
self-contradictory statement  as the meaning of the concept
'C' is not constituted only by the criterion 'Y', but many
others also.  For example, if the concept 'colour' has 'one
which is red' and 'one which is yellow' as its two criteria,
then to say "It is coloured, but not red" is not to make
either a self-contradictory statement, or necessarily a false
statement, for, it is possible that the object is coloured
because it is yellow.

(B) Characteristics of Symptoms:

(i) A symptom is sufficient, but not necessary:

On the ground of some symptoms, we hypothise the
existence of some· criteria and on the basis of the hypothised
criteria we use certain names and concepts.  For example, I
see a man coming from a distance, and he seems to walk like
my friend, on the basis of his walking style, I hypothise
that the existence of the criteria of my friend and on the
basis of that hypothised criteria I use the name in the
statement "My friend, Mr. X is coming".  And my brother who
also knows how my friend walks, looks at the man and testifies
my claim by observing the walking style of the man and
hypothises the existence of the criteria of the name 'X' and

says "Yes, probably that is Mr. X". It may very well happen that the gentleman terns out to be some unknown man. It is not necessary that I must make use of the name 'X' in making a statement only on the ground of the symptom of his walking style; I can very well make the hypothesis of the existence of the criteria of 'X' on the basis of some other symptoms, say, 'an unusually tall man wearing high heeled boots'. It is also not necessary that my brother must verify my use of the name by making use of the same symptoms. When I have made use of the name 'X' on the basis of his walking style which is a symptom of the criteria of the name 'X', my brother can test my use of the name 'X' on the basis of some other symptoms, say, his height or the type of boots he wears. The test will not be conclusive as there is some chance that they are not the criteria which are hypothised.

It is true of concepts also that one can use a concept on the basis of some symptoms of the existence of some criteria of the concept. On the basis that someone has fever, and day by day he is loosing his weight, and he coughs, vomits blood, I can use the concept 'T.B.' and make a statement that that man is suffering from T.B. It might turn out to be a false description, for he may have fever for different causes, he may cough also for different causes, etc. Nevertheless, someone else can test my use of the concept 'T.B.' in a context,

by making use of the same or different symptoms. Any test
with the help of symptoms will not be conclusive, for the
reason that the hypothised criterion may not exist.

(ii) Symptom-symptom, symptom-criterion, symptom-name,
     symptom-concept relations are empirical:

The relationship between a symptom and another symptom
of a criterion is empirical. For example that between Mr.
X's wearing a high heel boots and his peculiar style of
walking. From this I cannot say that whenever he wears high
heel boots, he will walk with the same walking style, and
vice versa. I know empirically that he walks in a peculiar
style of his own when he wears high heel boots, for I have
observed him wearing high heel boots and walking in that
peculiar style of his own many times.

The relationship between a symptom and a criterion
is, nevertheless, the same as that of a symptom and another
symptom. I observe that only Mr. X walks in a peculiar style,
and whenever I observe a man with this walking style, where
I have no ground to disbelieve that he is not Mr. X, I
hypothise the existence of criteria i.e. the definite
descriptions of Mr. X, and on the basis of this hypothised
definite descriptions I say "Xr. X is coming". No wonder
if he turns out to be somebody else. Therefore, my hypothesis
of the existence of criteria is based on my previous experience

that the symptom and criteria go together.  Whenever I have
seen a man walking with that peculiar style, I have found that
that man was Mr. X.

Symptom-name, or symptom-concept relationship will
also be empirical though the relationship of a criterion to
its name or concept is logical, for the relationship between
a symptom and a criterion is empirical, in the same way in which
a symptom and another symptom relation is empirical.  The
relationship between a symptom and a name or concept is via
the criteria of the name or concept.

A symptom and a criterion are sufficient but not
necessary.  On the basis of a symptom or a criterion or both
we make use of a name, a concept, and test their uses.  A
symptom and a criterion can be for more than one concept.
For example, the symptom that someone is suffering from fever
can be for more than one concepts, namely 'influenza', 'typhoid',
'T.B.' etc.  The criterion 'one who can reflect about himself'
is for the concept 'human being' and is also for the concepts
'living being', and 'rational being'.  If it is found that
someone is reflecting on himself then we can safely say that
he is a human being, that he is a living being, that he is a
rational being etc.

The relationship of symptom to names and concepts are
empirical, whereas, it is logical in the case of criteria.

The relationship between a symptom and another symptom is empirical but in the case of criteria, it is logical. A symptom of a name has to be symptom of another name otherwise it turns out to be a criterion for that name as it will be a definite description of the object named, whereas, a criterion for a name cannot be a criterion for another name, as a definite description of an object cannot be definite description of another object by definition. When a symptom is denied of a name or a concept, it does not lead to a false statement, whereas, when a criterion is denied of a name or a concept as the case may be, where they have more than one criteria, it will lead to a false statement. When a defining symptom of a name or a concept is denied of that name or concept, it will not lead to self-contradiction, but if a defining criterion of a name or concept is denied of that name or concept, it will lead to self-contradiction, as in that case what is asserted in one part of the sentence, we will be denying in its second part. Symptoms at best constitute the suggestive/ and emotive meaning of a name, whereas, the criteria of a name or a concept constitute their cognitive meaning. We can have a legitimate use of a name or a concept without a symptom, but we cannot have one without a criterion ( at least hypothised criterion). Test of the appropriateness of a certain use of a name or a concept by symptoms is probable, whereas, the test by criteria is certain and conclusive.

# CHAPTER I

## CRITERIA: SOME RECEIVED ACCOUNTS

### 1. Wittgenstein on Criteria:

Wittgenstein's notion of a criterion is best brought
out in The Blue and Brown Books, where he makes the distinction
between symptoms and criteria. Wittgenstein's notion of
criterion is liable to many interpretations as there are
ambiguities in it. Complexity of the subject matter also
contributed to this fact. I have tried to work out certain
meanings which seem to be hidden in his account. I hold the
view that Wittgenstein does not maintain the distinction between
symptoms and criteria. The subnumber (b) in the following
interpretations, I believe, will describe the real position
of Wittgenstein on criteria. I subsequently quote some passages
in support of my interpretation, both from The Blue and Brown
Books and Philosophical Investigations. Wittgenstein writes:

> "To the question "How do you know that so-and-so
> is the case?", we sometimes answer by giving
> 'criteria' and sometimes by giving 'symptoms'."[1]

This passage can be interpreted as: (a) Wittgenstein is
describing a social fact that what we do when such questions
are asked is to answer sometimes in terms of criteria and

---

1. Wittgenstein, L.: The Blue and Brown Books; (N.Y.: Harper
   Torchbooks, 1965), pp. 25-6.

sometimes in terms of symptoms, or (b). Wittgenstein is
holding the view that both these two ways of answering is
correct. We can answer in either way, or both ways.

> "I call "symptom" a phenomenon of which
> experience has taught us that it coincided,
> with the phenomenon which is our defining
> criterion."(B.B.p.25)

The term 'coincided' seems to have two interpretations: (a).
The same phenomenon is called two phenomena and therefore,
both the phenomena refered to are identical. (b). Two different
phenomena are found to be existing simultaneously. The word
"phenomenon" has two interpretations: (a). Any description,
or characteristic of an object also is a phenomenon in a
metaphorical sense. (b). A phenomenon is a happenning in
time and space, and hence is observable.

> "Then to say "A man has angina if this bacillus
> is found in him" is a tautology or it is a loose
> way of stating the definition of "angina"."
> (B.B.p.25)

This also has many interpretations: (a). We can call
statements tautological only when they are compound sentences
connected by some truth value connectives. The above sentence
is a tautology in this sense. (b). There is another sense
which is nearer to tautology, i.e., analyticity or necessarily
true. All tautological statements are necessary, but all
necessary statements need not be tautologies, e.g. "Occulist

is an eye doctor".   It is the necessity that is emphasized.

> ""A man has angina whenever he has an inflamed
> throat" is to make a hypothesis" (B.B. p.25)

This may mean: (a).   This sentence "A man has angina whenever
he has an inflamed throat" is a hypothesis. (b).   The general
fact which you have learnt from your repeated observation
makes you hypothise the existence of the criterion if you
observe a symptom.

> "... the answer "I have found the bacillus
> so-and-so in his blood" gives us the criterion,
> or what we may call the defining criterion of
> angina."    ( B.B. p.25)

This can be interpreted in these ways: (a).   "I have found
the bacillus so-and-so in his blood" is iteself the criterion
of angina. (b).   One who makes this statement sincerely, is
observing that the criterion of angina is satisfied by the
man who has the bacillus so-and-so in his blood.   The phrase
"what we may call the defining criterion of angina" has two
interpretations: (a).   What we may call mistakenly as the
defining criterion of angina. (b).   What we may call rightly
this as the defining criterion of angina.

> "If on the other hand the answer was, "this
> throat is inflamed", this might give us a
> symptom of angina." (B.B. p.25)

The phrase "this might give us a symptom of angina" has two
interpretations: (a).   Might succeed or fail in giving us a

symptom. (b). Might give us a symptom or a criterion.

> "In practice, if you were asked which phenomenon
> is the defining criterion and which is a symptom,
> you would in most cases be unable to answer this
> question except making an arbitrary decision ad
> hoc." ( B.B. p.25)

This sentence can be interpreted in the following ways: (a).

Though there is a distinction between the defining criterion

and a symptom but because of practical difficulty you are not

able to distinguish a criterion from a symptom. (b).  There

is no need of making such a distinction.  In fact certain

words do not have any distinctive criteria and symptoms.  Any

symptom can be taken as criterion if you need it for some

practical purposes.

> "It may be practical to define a word by taking
> one phenomenon as the defining criterion, but we
> shall easily be persuaded to define the word by
> means of what, according to our first use, was
> a symptom." (B.B. p.25)

"It may be practical to define a word by taking one phenomenon

as the defining criterion" can be interpreted as: (a). It has

theoretical as well as practical significance. (b). It has

only practical significance.  The expression "but we shall

easily be persuaded to define the word by means of what,

according to our first use, was a symptom" can be interpreted

in the following ways: (a).  A defining criterion is constituted

of all symptoms; therefore, we shall easily be persuaded to

define the word by means of what, according to our first use, was a symptom. (b). It may be practical to define a word by taking one phenomenon as the defining criterion eventhough there is no such criterion. It depends upon which symptom you consider to be a criterion. You do not need a criterion, theoretically speaking. You can very well use the words according to their symptoms. The phrase "first use" also can be interpreted in these ways: (a). When we define a word in terms of one criterion we make use of a symptom, but when we are persuaded we make use of the remaining symptoms also; therefore, all symptoms taken together will constitute the criterion. (b). There is no distinction between a criterion and symptom, you can use any symptom as a criterion if you like.

> "Doctors will use names of diseases without
> ever deciding which phenomena are to be taken
> as criteria and which as symptoms; and this need
> not be a deplorable lack of clarity."(B.B. p.25)

One may interpret it as: (a). We can talk of criteria and then symptoms of names, but that does not necessarily mean that we cannot talk of symptoms and then criteria of concepts. (b). We can perfectly use the words without deciding which is a criterion and which is a symptom before or after the use of a word.

> "For remember that in general we don't use
> language according to strict rules - it hasn't
> been taught us by means of strict rules, either."
>                                        (B.B. p.25 )

This statement can be interpreted as: (a). It is just a factual statement that we do not use language according to strict rules and it has not been taught us by means of strict rules.(b). There is no need to use language according to strict rules; that is why it has not been taught us by means of strict rules.

> "We, in our discussions on the other hand,
> constantly compare language with a calculus
> proceeding according to exact rules".(B.B.p.25)

This can be interpreted as:(a).  It is just a factual statement. (b).  It is wrong to do so, as language and calculus have nothing significant in common.

On the basis of the above we can sum up Wittgenstein's position as follows: Wittgenstein does not maintain the strict distinction between symptoms and criteria.  When questions like "How do we know that so-and-so is the case?" is asked, one can answer either in terms of symptoms or what one considers as criteria.  Two different phenomena are found to be existing simultaneously;  therefore, the relationship between a symptom and a criterion is based on repeated experience. A criterion is defined in terms of a phenomenon and it is a happenning in time and in space, and hence we can talk of only

> behaviour let us take holding your cheek. Suppose
> that by observation I found that in certain cases
> whenever these first criteria told me a person
> had toothache, a red patch appeared on the
> person's cheek. Supposing I now said to someone
> "I see A has toothache, he's got a red patch on
> his cheek". He may ask me "How do you know A
> has toothache when you see a red patch?" I should
> then point out that certain phenomena had always
> coincided with the appearance of the red patch."
>
> ( B.B. p.24, emphasis is mine )

I believe that in this context Wittgenstein is referring
to 'holding your cheek' by the phrase 'the first criterion'
Perhaps the second criterion is 'the red patch appeared on
the person's cheek'. These two are the criteria for judging
whether someone has toothache. We have repeatedly observed
that whenever someone is suffering from toothache, he holds
his cheek and there will be a red patch on his cheek. But
are these two criteria at all? If I say "Someone holds his
cheek, but he is not suffering from toothache" or "Someone
has red patch on his cheek, but he is not suffering from
toothache", these statements need not be false for in both
the cases a man may be acting. But, if 'holding one's own
cheek' is a criterion for having toothache, then according
to Wittgenstein "Someone is having toothache because I have
found him holding his cheek" is a tautology and if this
sentence is negated, it must be contradictory ( or false ).
As there is some possibility of its not being false in some
contexts, the supposed criterion is not a criterion. The

same thing can be said about our second criterion 'I have
seen a red patch on his cheek' as well.  I do not think that
first and second criteria are criteria  for the reason that
they do not have necessary relationship with 'having toothache';
therefore, they are only symptoms.  This shows that Wittgenstein
is using the term "criterion" here to refer to symptoms.

> "The fluctuation in grammar between criteria and
> symptoms makes it look as if there were nothing
> at all but only symptoms. We say, for example:
> "Experience teaches that there is rain when the
> barometer fall, but it also teaches that there
> is rain when we have certain sensations of wet
> and cold, or such-and-such visual impressions."
> In defence of this one says that these sense-
> impressions can deceive us.  But here one fails
> to reflect that the fact that the false appearance
> is precisely one of rain is founded on a
> definition."4 (P.I. Sect. 354)

It is only because of repeated experience that we say
that there is rain when the barometer falls, that there is
rain when we have certain sensations of wet and cold, or that
there is such-and-such visual impressions.  To say that sense
impressions can deceive us is to say that they are not
criteria; they are symptoms, for a criterion can never deceive
us as there is a necessary relationship between a criterion
and a word whose criterion it is.  It depends what is our

4.  Wittgenstein, L. : <u>Philosophical Investigations</u>, trans.
by G.E.M. Anscombe ( N.Y.:  The Macmillan Company, 1968),
Sect. 354.

definition of 'rain', and on that basis we can talk of the false appearence. If we define rain in terms of 'such-and-such visual impressions', then it is possible that there is no rain when the barometer falls, or when we have certain sensations of wet and cold. If we define rain in terms of 'certain sensations of wet and cold' then the other two can deceive us. This is to say that there is no definite criterion for 'rain', one can take any symptom as the defining criterion.

> "How do you know that you have raised your arm?"
> -- "I feel it." So what you recognize is the
> feeling? And are you certain that you recognize
> it right? -- You are certain that you have
> raised your arm; isn't this the criterion, the
> measure, of the recognition?"(P.I. Sect. 625)

Your being certain that "I have raised my arm" is the criterion for your knowing that "I have raised my arm". But, is "Your being certain that you have raised your arm" a criterion for 'your raised arm'? Certainly not, for "You are certain that you have raised your arm, but you have not" is not a necessarily false statement. Either Wittgenstein is talking about a criterion which is not inter-subjective or it is not a genuine criterion, but only a symptom.

> "Our criterion for someone's saying something to
> himself is what he tells us and the rest of his
> behaviour; and we only say that someone speaks
> to himself if, in the ordinary sense of the words,
> he can speak. And we do not say it of a parrot;
> nor of a gramophone." (P.I. Sect. 344)

Our criterion for 'someone's saying something to himself' is 'what he tells us and the rest of his behaviour'. To say "Someone is saying to himself because that he said to us so and his rest of the behaviours are consistent with what he said" is not to make a tautology, for "Someone said to me that he is saying to himself and his behaviour is also consistent with what he says, but he is not saying to himself" is not a necessarily a false statement.

My agreements and disagreements with Wittgenstein are on the following points:  Both of us agree that when questions like "How do we know that so-and-so is the case?" is asked, one can answer either in terms of symptoms or criteria. I hold the view that there is a difference in these answers. When we answer the question in terms of symptoms, it is probably true, but when we answer it in terms of criteria, it is necessarily true, if it is true. Wittgenstein also holds the view that the answer in terms of criteria is necessarily true ( he uses the term 'tautology'); but I think he holds the view that even if it is answered in terms of symptoms, it is true for there is no clear distinction for Wittgenstein between a criterion and a symptom.  Wittgenstein defines criterion and symptom in terms of phenomena, and phenomena have to occur in space and time;  hence they must be observable. But though my conception of criterion and symptom include

observable criteria and symptoms, it also covers unobservable criteria and symptoms. For example, when we talk of metaphysical entities like 'mind', we can have unobservable criterion as well. One may provide a criterion for 'mind' as 'a source of thought' according to his conception of mind, and the behavioural aspects of thoughts can be taken as symptoms.

Wittgenstein holds the view that there are certain words which have no criteria because of which they do not have strict rules. I hold the view that words have strict rules because of criteria; without criteria we cannot have rules at all. And the fact that we can say that the use of a word in certain context is wrong, is to say that we have a criterion to decide whether the use is correct or not. Wittgenstein can think of symptoms of a word without any criteria, but, for me a symptom is always a symptom of some criterion or other. A symptom has some contingent relationship with words via criterion. Wittgenstein holds the view that we will be persuaded to define a word in terms of symptoms as well, but I differ from him and hold that the real definition of a word can be only in terms of criterion/criteria as the case may be. But, when we provide symptoms of a criterion/criteria of a name, or concept, we do not define it, but we describe it. From the fact that we do not use certain words according to strict rules, Wittgenstein concludes that there are no strict

rules for them, but I hold the view that from this fact what we can conclude is either that we do not bother to use words according to strict rules, or we do not need to use words according to strict rules, as there must be some provisions to commit mistakes as well.

2. Some Misunderstandings about Criteria:

(A) Hare: Meaning and Criteria:

Hare puts forth before himself the task of showing that meaning and criteria are not necessarily related to each other. This he tries to prove by proving that we can know the meaning of words without knowing their criteria and we can know criteria without knowing the meaning of the words. He starts by analysing the concept of 'good', and writes:

> "It is a characteristic of 'good' that it can be applied to any number of different classes of objects. We have good cricket-bats, good chronometers, good fire-extinguishers, good pictures, good sunsets, good men. The same is true of the word 'red' ; all the objects I have just listed might be red. We have to ask first, whether, in explaining the meaning of the word 'good', it would be possible to explain its meaning in all of these expressions at once, or whether it would be necessary to explain 'good cricket-bat' first, and then go on to explain 'good chronometer' in the second lesson, 'good fire-extinguisher' in the third, and so on; ..."[3]

---

3. Hare, R.M. : The Language of Morals,(London: Oxford University Press, 1975), pp. 95-6.

He puts forth an argument against the view that meaning
and criteria are necessarily related, thus:

> "But in fact one of the most noticeable things
> about the way we use 'good' is that we are able
> to use it for entirely new classes of objects
> that we have never called 'good' before. Suppose
> that someone starts collecting cacti for the first
> time and puts one on his mantel-piece the only
> cactus in the country. Suppose then that a
> friend sees it, and says 'I must have one of those';
> so he sends for one from wherever they grow, and
> puts it on his mantel-piece, and when his friend
> comes in, he says 'I've got a better cactus than
> yours'. But how does he know how to apply the
> word in this way? He has never learnt to apply
> 'good' to cacti; he does not even know any
> criteria  for telling a good cactus from a bad
> one (for as yet there are none); but he has learnt
> to use the word 'good', and having learnt that,
> he can apply it to any class of objects that he
> requires to place in order of merit. He and his
> friend may dispute about the criteria of good
> cacti; they may attempt to set up rival criteria;
> but they could not even do this unless they were
> from the start under no difficulty in using the
> word 'good'. Since, therefore, it is possible to
> use the word 'good' for a new class of objects
> without further instruction, learning the use of
> the word for one class of objects cannot be a
> different lesson from learning it for another
> class of objects — though learning the criteria
> of goodness is a new class of objects may be a
> new lesson each time." (L.M., pp. 96-7)

Let us see whether Hare succeeds to prove what he
wanted to prove. In the above quoted passage, I believe,
what he wanted to prove is this: There is no necessary
relationship between meaning and criteria. His arguments are
two. First, he wants to disprove the claim that there is
necessary relationship between meaning and criteria by giving

a contrary example, where one knows the meaning of a word, but does not know any criterion for it.  Second, he tries to prove that even if two persons know criteria for a word and its meaning, they need not necessarily have the same criteria, though the word has the same meaning.  They can have even two opposite criteria for a word.  This, he believes, will prove that there is no necessary relationship between meaning and criteria and that there is some possibility of two persons having the same meaning, but different criteria for a word.

A use of a word does not necessarily mean an appropriate use.  For example, I can call a dull boy an intelligent boy. This will be a meaningful sentence, though false.  This is false because the use of the word 'intelligent' is not appropriate.  I should have not used this word for a dull boy.  Nevertheless, I am allowed to use this word for any boy appropriately or inappropriately; that would make sense. Two persons who have learnt the use of the word 'good' under certain circumstances can have only the following positions: (1).They have learnt to use the word without knowing which is the appropriate use and which is not in a weaker sense of the term 'learn to use'.(2).Both of them use the word in different senses; they have different concepts attached to the same word; both of them can use the word appropriately or inappropriately and the one appropriately and the other

inappropriately in the same or different contexts.

Take up the first position that two persons have learnt to use a word without knowing the appropriate and inappropriate uses of it. For example, I am observing that two persons are talking meaningfully about 'good cricket-bat'. I do not know the term 'good'. I know that they are using the term 'good' for cricket-bat. This gives me a hint (symptom) that one can meaningfully talk about cricket-bat in terms of goodness, without knowing what it is to be a 'good cricket-bat'. The minimum I have to presuppose is that those two persons were communicating something to each other. They were not acting or talking nonsense. I do not think Hare is referring to this kind of learning the use of 'good'. In this case a man only knows that about which object talking in terms of goodness does not make it nonsense (because of committing a category mistake). What one learnt is not the use of the word 'good', but one has learnt that there is such-and-such a word which people make use of in describing cricket-bats appropriately or inappropriately, but meaningfully.

In the normal sense of the term, we understand by the phrase 'to learn the use of a word', understanding of its appropriate and inappropriate uses. If one says that he knows a word and if he many times fails to tell that which is the appropriate use and which is the inappropriate use of the word

in different contexts, proves that he does not know the proper and improper uses of the word. It is wrong to say in this context that he has learnt the use of a word. That is to say, in the proper sense of the term, he has not learnt the meaning of the word. To know the meaning of a word, is not to know under what context a word can be used, but to know under what contexts it can be appropriately or inappropriately used. If this is the position of two persons which Hare is referring to, then Hare is mistaken in saying that they know the meaning, but not criteria. In fact they do not know both.

Now let us take up the second position that two persons use the same word in the same or different contexts in different senses appropriately or inappropriately. One who knows one sense of the word can make use of that word appropriately or inappropriately in a context. Another who knows only the second sense of the word uses the word appropriately or inappropriately in the same context. Certainly the first person and the second person will not have the same criteria for the use of this ambiguous word. They can even have opposite criteria. But from this what can anyone prove? One can only prove that when there is an ambiguous word and when two persons who know only one sense of the word will have different criteria. We have to admit in this case that both

of them have not learnt the full use of the ambiguous word.
Therefore, Hare's claim that they know the use of a word, but
differ in criteria is not going to prove that they know the
same meaning of the word.

We can certainly use the word 'good' meaningfully with
all those kinds of instances where the concept is 'good ...'
for the criteria of 'good ...' is constituted by the criteria
of two concepts 'good' and '...'. For example, if the concept
'good cronometer' has the criterion which is constituted by
the combination of the criteria of the concepts 'good' and
'cronometer' i.e. a good cronometer is one which is good as
well as cronometer at the same time, I need not have to know
the meaning of the word 'cronometer' in order to understand
the word 'good' in the phrase 'good cronometer'. But what
we cannot say by only knowing the meaning of 'good' is the
meaning of 'good cronometer'. It is so obvious that to
understand the meaning of a phrase, I must understand each
word in it. Though I know the meaning of 'good', I cannot
distinguish the appropriate and inappropriate use of the
phrase 'good cronometer' unless I know the meaning of
'cronometer'. What we do not know here is the criterion of
'good ...', but not that of the concept 'good'. 'Good' and
'good ...' are two different concepts, though the criterion
of 'good ...' is constituted by some combination of two

concepts 'good' and '...'. What Hare says amounts to is that
we do not know the criteria of 'good ...' eventhough we know
the meaning of 'good'. This does not prove anything, for if
we know the criteria of a concept that does not follow that
we know the criteria of some other concept necessarily. What
Hare had to show in fact if he wants to disprove that there
is necessary relationship between meaning and criteria was
that we know the meaning of 'good' without knowing the criteria
of 'good', or he had to show that we know the meaning of
'good ...' but not the criteria of 'good ...'.

Hare does not seem to make the distinction between a
meaningful use and an appropriate use. I do not need to know
the criteria of a concept to find out its meaningful use
though I do not know the meaning of the word. For example,
without knowing what is a 'good cricket-bat', I can know some
meaningful use of 'good cricket-bat' i.e. you can use the
adjective 'good' to the cricket-bats. But to know this is
not to know the meaning of 'good cricket-bat', for if I know
the meaning of it, I must be able to tell someone which is
an appropriate use and which is not. If I know the meaning
of 'good cricket-bat' I must be able to distinguish it at
least from bad cricket-bats. I cannot distinguish a good
cricket-bat from a bad cricket-bat unless I have a criterion.
Thus, I can know certain meaningful use of a word without

knowing any meaning or criteria of that word. I may produce meaningful sentences by making use of such words, but I will not understand the meaning of the sentences unless I know the criteria for the words.

To say that one can know the meaning of a word without knowing when to use it appropriately, or if it is used, whether the use is correct, is to make an unintelligible statement. A word is a word by virtue of its use. We cannot have a word which has no appropriate or inappropriate use. To say that a man knows the meaning, but does not know how to use it appropriately, is to treat words like entities, which can exist even if you cannot make use of them for any purpose. (At least one can think of such entities !) A word is not an entity, it is created by individuals for some use. A word has only a functional importance. To deny any functional importance to a word is to deny its very existence.

Hare tries to give another argument to show that meaning and criteria are not related. He writes:

> "I will now describe a way in which, provided
> that our foreigner knew the meaning of the word
> 'choose', I might indeed be able to explain the
> meaning of 'good' to him in one lesson, the
> paradoxical character of which will emphasize
> the point that I have been making. Suppose that
> I ask him to teach me one of the games of his
> own country, and he says that he will teach me
> about the game of smashmak. This game, he
> explains, is played with a thing called a shmakum.

Before asking him to describe to me a shmakum,
or to proceed with his account of the game, I
say to him 'Where do you get these shmakums from?'
and he answers 'From shmakum-makers; in our
country every town has a street of shmakum-
makers'. I then ask 'Suppose you are buying a
new shmakum, and you go to this street, and all
sorts of shmakums are offered you, all about the
same price, what sort of shmakum would you choose?';
and he replies 'All other things being equal, I
would choose the one that I could make the most
smashes with'. I then make a bold venture, and
say 'Ah! I see, then you think the best shmakum
is the one that you could make most smashes with'."

( L.M., pp. 103-4)

"The paradoxical feature of this explanation is,
that it is conducted with reference to a class
of objects (shmakums) the criteria for the goodness
of which I do not know. This shows that to explain
the meaning of 'good' is quite different from
explaining any of the various criteria for its
application." (L.M., p.105)

What Hare tries to prove with this argument, as I

understand, is that there is no necessary relationship between

meaning and criteria because it is possible to know criteria

for something without knowing the meaning of the word or

phrase.

I think that Hare is committing a mistake in thinking

that providing a criterion is to know the criterion. He

admits in the above paragraph that he does not know what

shmakums are. Given one, he cannot recognize it. Given ten

shmakums, he cannot select the good one. What he knows is

only to utter a meaningful sentence without knowing the

meaning of it. What he knows is that 'good' can be attributed to shmakums. This knowledge cannot be said to be the same as knowing what good shmakums are. I have a serious doubt whether we use the word <u>know</u> in the same sense when we say that "We know 'the best shmakum is the one that you could make most smashes with' is a criterion for 'the best shmakum'" and when we say that "We know how to make use of the criterion 'the best shmakum is the one that you could make most smashes with' for using the phrase 'the best shmakum'". In the former case we know <u>about</u> a criterion i.e. it is criterion for what, in the latter case we know the criterion in the sense we can operate with it. A criterion has a functional importance. If we do not know how to operate with a criterion, we do not know it. The distinction between <u>knowing how</u> and <u>knowing that</u>[4] is applicable here. One can be said to know a criterion in the sense of knowing how, not in the sense of knowing that. Hare's argument thus amounts to: I know (in the sense of knowing that) the criterion for 'the best shmakum' though I do not know the meaning of 'the best shamakum'. What Hare had to show was that he knows ( in the sense of knowing how ) the criterion for 'the best shmakum' though he does not know the meaning of 'the best shmakum'.

---

4. Ryle, G. : <u>The Concept of Mind</u>,( N.Y.: Penguin Books, 1976), p. 28 ff.

(B). Chihara and Fodor on Symptom and Criteria:

Charles S. Chihara and J.A. Fodor give an example for symptom and criteria distinction. They write:

> "Suppose that, while a game is in progress, a spectator leaves his seat. Though he is unable to see the playing court, he might realize that the home team had scored a field goal on the basis of a symptom - say, the distinctive roar of the crowd - which he had observed to be correlated with home-team field goals. This correlation, according to Wittgenstein, would have to be established via criterion, say, by noting the sound of the cheering when the home team shot the ball through the basket ... symptoms, unlike criteria, are discovered through experience or observation: that something is a symptom is not given by the rules of the "language-game" (not deducible from the rules alone)."[5]

In this example, the symptom is the distinctive roar and the criterion of scoring a field goal by the home team is 'the ball going through the basket in a particular way in that play'. Chihara and Fodor come to the wrong conclusion because of their wrong analysis of the play. They write further:

> "One can now see that to claim that X is a criterion of Y is not to claim that the presence, occurence, existence, etc., of X is a necessary condition of the applicability of 'Y', and it is not to claim that the presence, occurence, existence, etc., of X is a sufficient condition

5. Chihara, C.S. and Fodor, J.A. : 'Operationalism and Ordinary Language,' in Wittgenstein ed. by G. Pitcher, (N.Y.: Anchor Books, Doubleday & Company, 1966), pp.392-3.

of Y, it may be the case that X is a necessary
or a sufficient condition of Y."6

The reason given for this is:

"... the fact that the ball goes through the
foop does not entail that a field goal has been
scored. First, the ball must be "in play" for
it to be possible to score a field goal by
tossing the ball through the basket. Second,
even if the ball drops through the foop when
"in play", it need not follow that a field goal
has been scored, for the rules of basket ball
do not cover all imaginable situations. Suppose,
for example, that a player takes a long two-
handed shot and that the ball suddenly reverses
its direction, and after soaring and dipping
through the air like a swallow in flight,
gracefully drops through the player's own basket
only to change into a bat, which immediately
entangles itself in the net."7

I admit that in the rules of basket-ball play all the
imaginable situations are not considered, and the rules for
them are not explicitly stated. But, the field goal is
defined more precisely than what Chihara and Fodor think.
When the criteria of a field goal is talked about that it is
talked about the ball "in play" only is understood. Other
imaginable situations are also taken care of. In the case of
an undecidable situation the authority is given to the Umpire,
and if he declares it to be a field goal, it is the convention

6.   Ibid. pp. 393-4.

7.   Ibid. p. 391.

of basket-ball play that both parties have to accept it. But
even if the Umpire is not clear about the situation, he may
give one more chance to the team concerned. This does not
mean that we can never decide whether a field goal has been
scored or not. Even if in some cases we are not able to
apply the precise criteria, one need not be pessimistic; in
play it happens and we are satisfied with it. If Chihara
and Fodor want to call a game only if it is an ideal game
where every thing is precise, then they may have to become
pessimistic. If they think that language must be so precise
that there should not be any scope for committing mistakes,
for making insincere statements, then they are wrong, because
they are expecting too much. And even in an imaginable ideal
language, we cannot avoid the possibility of insincere and
incorrect statements. I do not think one should feel
pessimistic to find language not being more precise than
what it is, because it serves our purposes; if we make it
more precise, its beauty may vanish. This is what happens
in artificial languages like that of mathematics and logic.
Chihara and Fodor are mistaken as they think in abstraction
of "The ball going through the basket satisfies a <u>criterion</u>
for scoring a field goal". The 'X' which they take to be the
criterion is not the criterion of a field goal in basket-ball
game; that is why they are led to the conclusion that "X is
a criterion of Y is not to claim that the presence, occurence,

etc., of X is a sufficient condition of Y ...". The criterion
for a field goal in basket-ball would be that the ball "in
play" must go through the basket in a particular way according
to the rules of the game.

Chihara and Fodor also have misunderstood symptom to
be criterion. They wrongly claim that Wittgenstein holds
"one can tell, recognize, see, or determine that 'Y' applies
on the basis of the presence of X, then either X is a
criterion of Y or observations have shown that X is correlated
with Y".[8] In this quotation 'Y' applies on the basis of the
presence of X would mean that Y is a linguistic expression.
And "observations have shown that X is correlated with Y",
is to say Y is a phenomenon. In the proper terminology the
latter phrase would mean that X is the symptom for Y, where
X and Y are phenomena, and of which our experience has taught
us. 'Y' cannot be a phenomenon, but is a linguistic expression,
only then we can talk of the application of 'Y' to something
meaningfully. It makes no sense to talk of one phenomenon
applying to another phenomenon.

(C). Scriven on Criteria:

Michael Scriven, after analysing the concept of lemon,
and the criteria of its applicability to the given object

8. Ibid. p. 409.

lemon, comes to the following conclusions, where X is a linguistic expression like 'lemon,' and where C is the observable characteristic:

"i) If X, then $C_1$ or $C_2$ or ...

ii) If $C_1$ and $C_2$ and ..., then X.
even when we cannot find any of the traditional forms

iii) If X, then $C_n$.

iv) If $C_m$, then X.
we have also noted the crucial importance of statements of the form.

v) If X, then characteristically C

...andvi) If $C_j$ and $C_k$ ... , then probably X."[9]

Michael Scriven is right if $C_1$, $C_2$ etc., are criteria for X. Then if we say "It is X" and if our statement is correct and if we are not joking or not just making vocal sounds, then it would imply that it is $C_1$ or $C_2$ or ... (taken in the inclusive sense of 'or'). It seems to me that Scriven misses the point that we do and can make insincere statements, or we can just utter something without meaning anything, or we can describe something in ignorance, or describe something wrongly. In such latter cases X may not imply $C_1$ or $C_2$ or ... at all. If $C_1$, $C_2$ etc., are symptoms,

---

9. Scriven, M. : 'The Logic of Criteria,' The Journal of Philosophy, Vol. LVI, 1959, p. 865.

and none of them independently or taken together is defining criterion, then also this implication does not hold good, as the above mentioned possibilities remain. In the second case where $C_1$ and $C_2$ and ..., are criteria of X or some of them taken together form a criterion, then they imply X. It is equally possible to have inflamed throat and still not be affected by the infection of angina, for 'inflamed throat' is not a criterion for having angina. In the third case "If X then $C_n$" where 'n' is a variable and where X has more than one criteria irrespective of whether it is sincere or insincere statement or correct or incorrect statement, Scriven is wrong. But if X has only one criterion which is a defining criterion and if the description is a correct description and where 'n' is a constant then "If X" implies "$C_n$". In the fourth case "If $C_m$, then X", if $C_m$ is a relevant characteristic, to use the terminology of Scriven, which would mean to say that it is a criterion, then "If $C_m$", implies "X" and if $C_m$ is a symptom, then "$C_m$" does not imply "X". But all the characteristics which are symptoms need not be criteria at all. The fifth case "If X, then characteristically C" is also not true always. If we put some conditions, namely, that the description is a true description and C is the defining criterion of X, then only Scriven is right. And lastly, in sixth case "If $C_j$ and $C_k$ ...., then probably X", where $C_j$ and

$C_k$ etc. are merely symptoms then Scriven is right, but if $C_j$ and $C_k$ ...., are criteria or some of them are symptoms and some of them are criteria or all of them taken together form a criterion, then the question of probability does not arise and it will be certainly X, as in that case the statement becomes necessary.

Unfortunately it is not at all clear what is the actual position of Scriven. He writes as if he is giving the logic of criteria and indicators, where by indicators he exactly means what we mean symptoms:

> "Any property that is connected with another in such a way that it does not make sense to deny its application will be said to be analytically connected with it, as e.g., brotherhood is connected with siblinghood ... . Other connections will be called synthetic. Properties will be called <u>criteria</u> if they are other than synthetically connected to a given property, and <u>indicators</u> if they are other than analytically connected."[10]

By the use of the phrase "Any property that is connected with ...", Scriven seems to be talking about concepts as he gives the example of "brotherhood is connected with siblinghood". But in the later part of the passage quoted above when he says that "Properties will be called <u>criteria</u> if they are other than synthetically connected to a given property ..." he uses

---

10. Ibid. p. 861.

the terms 'property' and 'properties'. If Scriven means by 'property' what we actually perceive when we perceive an object, then the connection between these two properties cannot be analytic; rather it has to be synthetic. If by 'properties' he means concepts, then the connection between these two concepts are never synthetic. He writes "(properties are) <u>indicators</u> if they are other than analytically connected". Indicators are perceptual according to Scriven, and if he means by properties concepts, then also there cannot be any synthetic connection between a concept and an indicator directly. As I see it, in the beginning of the passage quoted, he means by 'property' concepts, but in the later part, he uses the word "property" in two senses. When he is talking of analytic connection, he means by 'property' the concept and when he is talking about indicators and properties he means by 'property' not concepts, but what we actually perceive when we perceive certain objects.

# CHAPTER II

## CONCEPTS

### 1. Importance of Concepts:

Concepts play a crucial role in any language. When we perceive something, we need concepts for articulating what we perceive. We perceive a thing as having some characteristics. We cannot perceive a thing which has no characteristics. We may not be able to state the characteristics of an object. That may be for two reasons: (1). our vocabulary may be poor, (2). there is no word or phrase in the language concerned which expresses that concept. We can perceive a red pen if we have a concept of 'red' and a concept of 'pen'. This is not enough; we perceive it as a red pen only when we apprehend that the exposed object to our sight is an instance of the concept 'red pen': an object which is red as well as pen at the same time.

When we think of something, not necessarily we think of a thing which we have perceived earlier. We can think of a red pen eventhough we have never seen a red pen. If we know what is to be red and if we know what is to be a pen, we know what is to be a red pen; we can very well imagine an object which is red as well as pen at the same time. What makes it possible for us to think of a thing which is (1). perceived earlier but not exposed to our senses at the moment,

or (2) is not perceived at all? This is possible because we have certain concepts which make us possible to form an idea of a thing, or to imagine it.

Every description involves at least one concept. We make use of a concept rightly or wrongly in making a descriptive statement. One can describe a thing which he is perceiving or which he has never perceived. One can describe one's own feelings, emotions and doubts. But one cannot describe anything without making use of a concept. A concept is not sufficient for a description, but, it is necessary.

Even when a man commands scolds, or blames someone, he makes use of concepts. When a man requests someone to do something, promises him to do something, praises him, etc., he cannot but makes use of concepts. Lastly, even questions cannot be asked without making use of some concepts. Without making use of concepts no linguistic activity will be possible. It is needless to mention that such complicated activities as theory-construction, argumentation, or intellectual dialectics, can be indulged in only by those who have acquired some amount of efficiency in the use of concepts.

2. Empirical Versus Conceptual Questions:

It is philosophically useful to maintain a distinction between an empirical and a conceptual questions, or as some

may prefer to call it, between factual and logical questions.
How much income an average Indian has?  What are the habits
and customs of an educated man?  Does gravitational force
work at the height of 5000 kilometers from sea level?  These
are some examples of empirical questions.  Is zero a number?
Is Euclidean geometry consistent?  Can there be a 'concept'
of concepts?  What is democracy?  These are a few conceptual
questions.  What makes a question empirical or conceptual is
largely the method adopted in answering a question.  If one
has to ascertain what a certain set of facts are, or could
be, in order to answer a question, then it is an empirical
question.  Instead, if one has only to reflect  on his
thoughts, on what can or cannot be meaningfully said, on the
relations of certain ideas, to answer a question, then it is
a conceptual question.  The difference thus consists very
greatly in the methodology one is required to adopt in
answering a question.

An empirical scientist is mostly concerned with
empirical questions.  A theoretical scientist will on the
other hand is attracted more by a conceptual question.  But
a scientist might take up an empirical investigation as well
as a conceptual investigation.  If he predominantly
investigates into conceptual problems  then he is usually
called a theoretical scientist;  whereas . if he predominantly

investigates into empirical questions, then he can be rightly
said to be an empirical scientist.

A philosopher's proper questions are conceptual, though
historically some have taken up empirical questions for their
investigation. A genuine philosopher is not interested to
know for example what is an atom?. Whereas, he is very keen
to know what is an 'atom', i.e. what it means to say that
something is an atom. He is least interested in such questions
as: Out of which materials a table is made? But, he is much
interested in 'What is 'matter'?' He might not doubt that he
is in pain; but, he is interested to know if any one can be
in pain and at the same time be doubtful about it. A
philosopher is not interested in a thing which a concept
refers to, but, he is interested in the concept itself, in
how a concept behaves. If he is ever interested in the things
to which concepts apply, it is because that may help him in
understanding the behaviour of concepts.

Not all concepts attract a philosopher. Concepts
like 'development,' 'industrialization,' 'urbanization,'
'poverty,' etc., have been neglected by philosophers, but
have been taken up by theoretical scientists. However, even
such concepts can be philosophically studied. One may ask
how does a philosopher select his concepts for philosophical

discussions?  Some of the important ways are the following:[1]
(1). Some concepts can be chosen because they have been the
subject of debate in history of philosophy, e.g., 'matter,'
'mind,' 'soul' etc.  (2). Some concepts can be chosen, because
they are basic to any discourse,  e.g., 'validity,' 'knowledge,'
'truth' etc.. (3). Some concepts can be chosen because they
are basic to more than one discipline, e.g., 'motivation,'
'equality' etc., which are basic to Sociology, Political
Science, and Ethics. (4). Some concepts can be chosen because
they are basic to all sciences, e.g., 'cause,' 'law' etc..
(5). Some methodological concepts pertaining to the very
activity of inquiring can also be chosen, e.g., 'natural
science,' 'social science,' 'analysis,' 'speculation' etc.
(6).  Some concepts can be chosen because they are basic to
some specific discipline, e.g., 'number,' 'zero,' 'infinity'
etc., which are basic to mathematics.  Finally, (7). Some
concepts can be chosen because they are concepts of common-
sense life, e.g., 'success,' 'progress,' 'reliability' etc.

Majority of philosophical discussions centre around a
set of concepts.  It is always helpful to be clear about the
theory of concepts a philosopher holds before making an

_____

1.  These different ways are suggested by Dr. Rajendra Prasad
    in his forth-coming book on Philosophy of Language
    (Hindustani Academy, Allahabad).

attempt to understand him. However, every philosopher does not possess his own theory of concepts. He may agree with a theory of concepts put forth by some one else in essentials, if not in every detail; or he may sometime puts forth a theory of his own. But every philosophical endeavour a philosopher makes must be backed by a theory of concepts, implicitly accepted or explicitly formulated; otherwise, neither he, nor others will be able to properly judge what he is trying to seek by seeking an answer to a conceptual question.

## 3. Search for Essence:

What is virtue? This is, or can be taken as, a conceptual question. In answering this question one must be able to distinguish virtue from wickedness. And one must give what is that which is common and peculiar to all virtue. Hence, we sometimes feel that it is the search for essence that is involved in the study of a concept.

Some philosophers (except Wittgenstein) have searched for essence of concepts in different things. Plato, Aristotle and Russell have searched the essence of concepts in reality; whereas, Locke, Berkeley and Hume have searched the essence of concepts in the human mind. Hobbes and Ockham have searched for the essence of concepts in language, and Phenomenologists

have searched for the essence in <u>experience</u>. For Plato, the essence of a concept is its <u>Form</u>; for Aristotle, it is <u>differentium</u>. Russell thinks that the essence of a concept is the way its objects <u>resemble</u>; whereas, Locke, Berkeley and Hume think that the essence of a concept lies in its <u>generality</u>. <u>Similar</u> experiences form the essence of a concept for Phenomenologists.

What is virtue? Historically speaking this question has been asked at four different levels: (1). at conceptual level, (2). at verbal level, (3). at factual level, and (4). at perceptual level. And these determine the nature of questions correspondingly as: (a). conceptual question, (b). verbal question, (c). empirical question, and (d). epistemic question. Depending on the level of inquiry, the above question meant differently for different philosophers. For example, it means (i). 'What is the concept of 'virtue'?' to Socrates, Plato, (ii). What the word 'virtue' connote or denote? to Nominalists like Hobbes and Ockham, conceptualists like Locke, (iii). What is the common characteristic(s)/ resemblance(s)/family resemblances in different virtuous persons? to, Aristotle, Russell, Wittgenstein, (iv). What is the kind of experience that one will have when he experiences different virtuous persons? to Phenomenologists.

However, all these different philosophers have lost the real conceptual question that is involved in the question "What is virtue?". This question is not verbal, nor epistemic, nor about reality or mental capacities; but, it is about the concept of 'virtue'. What one is really asking by asking this question is:  What are the criteria of the concept 'virtue'?

4. Conceptual Relations:

What are the possible conceptual relations which a concept can have with other concepts?  A satisfactory theory has to answer this question about concepts.  In answering it, it also has to answer the following:

(A). How is it that some concepts are genus and some other concepts are their species?  Or, how is it that certain concepts include certain other concepts? For example, how is it that a red object is <u>necessarily</u> a coloured object also? that is, how is it that the latter includes the former?

(B). Two opposite concepts have some other kind of conceptual relations.  How is it possible to have opposite concepts?  What makes two concepts opposed to each other? Why, 'kind' and 'cruel,' 'married' and 'unmarried,' are pairs of opposite concepts?  In other words, how is that we cannot predicate a pair of opposite concepts to the same subject, correctly or incorrectly, at  the same time? For example, why

can't I say that some one is kind as well as cruel, or married as well as unmarried at the same time? To put the question differently, if I predicate a pair of opposite concepts to the same subject(s) at the same time, or in the same context, why should that be a meaningless sentence?

(C). The third kind of conceptual relationship, if not entirely different from the second, is that of incompatibility of certain concepts. Opposite concepts are also incompatible, but all incompatible concepts are not opposite concepts. For example, 'red,' 'yellow,' 'green,' 'blue' etc., are incompatible concepts. You cannot attribute two concepts, out of this group, to the same subject, at the same time. Nevertheless, these concepts are not opposite concepts. Only a pair of concepts can be opposite concepts. Even if I pick out 'red' and 'yellow' or any two or some particular two members of the group; they do not form a pair of opposite concepts. He is not kind (or unkind), would mean, he is cruel. But, if I say that it is not red, it will not mean that it is yellow. Incompatible concepts form a group. The number of the members of a group of incompatible concepts can vary. A satisfactory theory of concepts has to explain why if two incompatible concepts are predicated of the same subject, it gives rise to a meaninglessness.

Opposite concepts should not be treated the same as contradictory propositions ( or statements), and incompatible concepts should not be treated the same as contrary propositions ( or statements). Concepts are neither propositions nor statements. We can talk of propositions or statements being true or false, but we cannot talk of concepts or their uses being true or false.

Contradictory and contrary propositions are defined in terms of their truth values. Two propositions are said to be contradictory if both of them cannot be true together and false together; and two propositions are said to be contrary if, both of them cannot be true together. One may be tempted to say that there is no need to use different terminologies for, what we will have when we use two opposite concepts to describe one and the same object is a pair of contradictory propositions and what we will have when we use two incompatible concepts to describe one and the same thing is a pair of contrary propositions.

Not all contradictory propositions involve a pair of opposite concepts. For example, "X is yellow" and "X is not yellow", these two propositions are said to be contradictory, for they cannot be true together and false together. But, they do not involve a pair of opposite concepts. Similarly, not all contrary propositions involve a pair of incompatible

concepts as well. For example, "All men are mortal" and "No man is mortal", these two propositions are said to be contraries for, they cannot be true together. But, they do not involve incompatible concepts.

When we say that two concepts are opposite concepts, we do not talk of only two propositions, but we talk of all possible contradictory statements that we can have by making use of these two concepts. Similarly, when we say that a group of concepts are incompatible, we do not talk of only a pair of propositions, but we talk of all possible pairs of contrary statements by making use of any two concepts from that group.

To say that two propositions are contraries is not to say that if one considers both of them together, they will be meaningless, for they will be false together or one of them will be false. But to say that a group of concepts are incompatible is to say that if any two of the concepts are used as predicates of a subject at the same time, then the sentence will be meaningless.

(D). The fourth kind of conceptual relationship is exemplified when two conepts belong to the same or different categories. A case of category mistake is not a case of having applied to an object opposite concepts. When two concepts are opposite concepts each one of them can be predicated

of the same subject correctly or incorrectly, at different times. Concepts which belong to different categories are many, e.g., the concept of 'triangle' belongs to one category, 'square root' belongs to another, and 'democracy' to still another category. And further, if I can predicate the concept 'triangle' to some subject, I can never and not only at the some time meaningfully predicate the concepts 'square root' and 'democracy' to that subject. Incompatible concepts are different from those which are categorically different. Incompatible concepts belong to one group; whereas, concepts belonging to different categories cannot  belong to one group. Incompatible concepts belong to one group because they are species of a genus; whereas, concepts belonging to different categories do not have a genus; hence, cannot belong to a group. However, the same subject can be predicated of two concepts belonging to same group of incompatible concepts meaningfully at different times; whereas, two concepts belonging to different categories can never be meaningfully predicated of the same subject. Concepts belonging to two or more categories are incompatible concepts; they are not just incompatible concepts, but something more. An example of category mistake is: Russell is square root of 4. 'Russell' belongs to the category of human beings; whereas, 'square root' belongs to a category in mathematics. A satisfactory

theory of concepts has to explain when and how a category mistake is committed.

A concept is said to be vague, if there are cases in which there is no definite answer as to whether or not it properly applies to a certain object. 'Middle-aged,' 'inhabitant'[2] are vague in this sense. At age 10 and at age 80, one is not 'middle-aged'; at age 50, one is. But, we cannot say for certainty whether a man at 28 or 58 is 'middle-aged'. A man who stays in a city for 11 months is an inhabitant of that city; whereas, a man who stays only for a month, is not. But, what about a man who stays for only 5 or 7 months in that city? This invites a theory of concepts to explain: How concepts can be vague? Why certain concepts are vague? What is it which makes a concept vague?

Russell can be said to have constructed a concept, e.g. that of 'material implication'. It was not available to us before his formulation. Moore also can be said to have constructed the concept of 'entailment', Hare those of 'phrastic' and 'neustic'. New concepts can be constructed, old ones can be revised or modified. A theory of concepts therefore has to explain: How concepts can be constructed? How revised? etc.

---

2.  Alston, W.P. : Philosophy of Language, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965), pp. 84, 90.

It is very common in philosophy and science, or rather in any theoretic venture, to have an occasion for defining certain technical concepts. Hegel defines his concept of 'Reality', Hume that of 'Impressions'. It is very common in mathematics and geometry to define their technical concepts in terms of their basic concepts. Certainly, when a man defines a concept he defines it in terms of some other concept or concepts. A theory of concepts must have a provision for definition of one concept in terms of another.

## 5. Verbal ... Versus Conceptual Change:

A simple verbal change can be said to be a kind of change that is orthographical or phonological. A word so changed would continue referring and signifying as it did before the change. The changed word will perform all linguistic activities or a part of any linguistic activity exactly in the same way as in its earlier form did it. In American English, the spelling of the words "neighbour," "colour" are "neighbor," and "color" respectively. But "neighbor" and "color", have the same use as "neighbour" and "colour" have. There is no change in the meaning of these words. Similar cases can also be found when pronounciation of words are changed.

There are, however, some examples which are not mere cases of verbal change. Suppose the earlier name of a national

But conceptual change is not identical with verbal change. When there is a conceptual change, then in usual cases there is change in reference. Good examples can be found when one extends or restricts the use of a concept (word). For example, in eighteenth century use of the term "philosophy" has now been made very restrictive. Earlier psychology also was a part of philosophy, and when people found it desirable to separate psychology from philosophy, automatically they had to restrict the use of term "philosophy". When Bernard Mayo[3] proposes to restore the use of the terms "true" and "false" to the ethical judgements, he proposes to change the Logical Positivists' concepts of 'true' and 'false' by extending them. Normally, there will not be any verbal change when we extend or restrict the use of words.

## 6. Ambiguity:

Extending the use of a word need not be necessarily a case of conceptual change. For example, formerly the word "bank" was used in cases of rivers. Rivers have banks. But, later on, the use of the word "bank" is extended to cover institutions performing certain monetary transactions. But, this is not a case of conceptual change. It is a case of

---

3. Mayo, B. : <u>Ethics and The Moral Life</u>, ( N.Y.: MacMillan & Co. Ltd., 1958), pp.73 ff.

making a word ambiguous or multivocal. In this case the word "bank" has gained one more reference. When a man extends or restricts the use of a concept ( or when there is a conceptual change ), there is no change of sense of the word concerned. We talk of two senses of a word, but not of a concept. When we say that a man has gone to deposit money in a bank, we understand the word "bank" in the sense of 'money bank,' but when we say that Ganges has a narrow bank at Varanasi, we understand the word "bank" in the sense of a 'river bank'. The word "bank" has now become associated with two concepts: (1). bank of a river, and (2). a money bank. A word when it is associated with two concepts, it generally gives rise to ambiguous sentences, unless the two concepts which are associated with it belong to two different categories.

If a word is associated with two concepts, and if these two concepts have no symptoms in common, then the use of the word in a context will not lead to an ambiguous sentence. Ambiguity is possible, when a sentence can have two meanings. Suppose, concepts P and S are associated with the word W; then in a context where one can use the word W meaningfully, in the sense of P, we cannot use the word W in the sense of S meaningfully in the same context if P and S belong to different categories. This happens precisely

because any symptom or criterion will not be common to both the concepts P and S. Because of this, wherever we can use the word in the sense of P it cannot be used in the sense of S and vice versa, in a meaningful way. This avoids the communication gap because whenever we use such a word in any context, for the word cannot be used in any one context in both the senses meaningfully, we take only relevant sense of the word. There will not be any difficulty in testing whether the use of a word is appropriate or not, for we need to test the criteria of only one concept which is associated with that word, and the use of which makes sense in that context. An ambiguous word which is associated with two concepts belonging to different categories does not lead to any ambiguous sentences for, only in one sense the word can be made use of; in another sense we cannot make use of the word in a context, because it commits category mistake and we will not be able to make a meaningful sentence. For convenience let us use R-bank to express a sense of the word 'bank' i.e. the river bank, and let us use M-bank to express another sense of the word 'bank' i.e. the money bank. A sentence which is ambiguous will have atleast two meanings. A sentence will have two meanings only when the word 'bank' can be used in both the senses in a context. That is to say the subject, to which the word 'bank' is used as a predicate concept, must

satisfy at least some symptoms of both the concepts, i.e. it must have some symptoms of R-bank and M-bank. If I meet a man and he says that he is going to a bank, it can be an ambiguous sentence to me if the context is not making clear whether he is going to a money bank or to a river bank. I fail to understand what he wanted to convey to me is precisely because, there are some symptoms which are common to both the concepts i.e. R-bank and M-bank, namely, 'people go to money bank' and 'people go to a bank of a river'. If people never go to a bank of a river, then the sentence would not have been ambiguous.

Moreover, there are some more practical difficulties with such ambiguous sentences. Suppose, a speaker uses the word in the sense of R-bank, he talks about a thief and says "Mr. X has kept the money in a bank", and a hearer takes the use of the word to be in the sense of M-bank and if he is interested to test the appropriateness of the sentence, he may check up and find that the sentence is inappropriate. But, the speaker himself may test the appropriateness of his statement by checking whether he can find the money in a river bank which Mr. X has kept. He may conclude that the sentence is appropriate. Therefore, it is a must to test the criteria of both the concepts of the word, in order to test the appropriateness of the use of an ambiguous word. But, there

is another difficulty, suppose, if the speaker meant R-bank,
and the hearer took it to be M-bank and the hearer found
that X has kept the money in M-bank, then he may declare that
the sentence is appropriate, and the speaker himself may come
to the conlusion that the sentence is inappropriate. When
one uses an ambiguous sentence it may happen that an
appropriate sentence is considered to be inappropriate or
vice versa. From the point of view of communication success,
it is always advisable from the speakers point of view to
specify in which sense he is using an ambiguous word, if the
context in which he is using the word keeps some possibility
of ambiguity of a sentence in which the word occurs. I
believe, a theory of concepts must explain how it will be
possible to have ambiguity.

## 7. Conceptual Change Versus Change of Concepts:

There is every possibility that a conceptual change is
treated the same as a change of concepts. A word might be
formerly associated with one concept, and when there is
change of concept, we drop out the concept and associate a
new concept with that word. For example, the word "atom"
in physical science was associated with the concept of 'atom':
the smallest particle which is indivisible. Suddenly, when
it is scientifically proved that an atom can be broken further

or by bombardment it can be converted into energy, the concept of 'atom' implying that atoms are indivisible is replaced by a new concept of 'atom' which no more implies that atoms are indivisible and permits that they could be divisible. By the term "atom" a modern physical scientist means a divisible atom, which has electrons, protons and newtrons as its constituents, and not something indivisible. This is a case of change of concepts, not a conceptual change. The difference between the two is that when there is a conceptual change, there is no imitiation of an association of a new concept with the word or dropping a concept which has been associated with it.  But in a case of a change of concepts, the word is detached from the old concept with which it was associated, and an association with a new concept is brought about.  This example is of the kind where one concept of atom has replaced another concept of atom, but it is not difficult to imagine  a case of change where a concept of one category is replaced by a concept of another category.

When there is a conceptual change, there will be change in its denotation. The cases of extending or restricting the use of a word are cases of change in what the word denotes. Before the separation of psychology from philosophy in the eighteenth century, the term 'philosophy' used to denote

different branches of philosophy including psychology. After
separation, it stopped denoting psychology. When Mayo proposed
to extend the use of the concepts 'true' and 'false' even to
ethical judgements, **by restoring their** earlier usage against
the Logical Positivists,  he is changing the denotation of
the words 'true' and 'false'.  On one interpretation these words
apply to only descriptive statements, and not to ethical
judgements.  Mayo's concept of 'true' and 'false' applies to
both descriptive statements and ethical judgements.

It is not difficult to think of a case where both
verbal change and conceptual change have occured at the same
time, as these changes occur at different levels.  If I
restrict or extend the use of a concept and at the same time
if I change the word also, then it will be an example of both
verbal and conceptual change.

The fact that we can restrict or extend the use of a
word gives a challenge to a theory of concepts.  However, a
theory which cannot explain this popular phenomena in the
world of concepts must be labelled as 'unsatisfactory'.

Credit certainly goes to a theory of concepts, if it
satisfactorily explains the logical relationship between
concepts and its objects.  This logical relationship cannot
be explained without holding a theory of word-meaning. Words
have to contribute much to sentence-meaning.  I believe that

a satisfactory theory of concepts will be in a good position to identify the role of words in sentence-meaning. This would give a full theory of meaning.

It is the meaning of a word that determines the objects referred to by the corresponding concept. Such a theory which has a theory of word-meaning will be in a position to tell us which objects can be properly designated by a concept. If we know which objects can be properly designated by a concept, we also know which we cannot. If a concept indicates which are the objects of which that one can properly predicate it, it has to provide us a list of criteria for the purpose. The theory must throw some light on meaning-criteria relationship.

It will be a good test of a right theory of concepts if it can explain satisfactorily how analytic or apriori statements are possible, curiously enough which are the sentences involving only concepts, in contrast with the sentences which involve both names and concepts, or only names, which are generally called as contingent statements. This gives us a classification of statements.

And further, a right theory of concepts must also be in a position to throw some light on the fact that truth of an analytic statement does not depend on something external to it; but, on the very meaning of the constituent words. If

we have a theory of meaning, and if we have meaning-criteria
distinction, then, it is very likely that we would be able
to evolve a theory of truth as well. A theory of truth
provides different criteria to testify the truth value of
different kinds of sentences.

I believe that a theory of concepts which has a theory
of truth and a theory of meaning, will be in a very good
position to explain how different statements have certain
logical relationships, as all statements are constituted of
names/and concepts. This would yield a logical theory.

8. Universals and Concepts:

It might happen that when we name a theory, we make
use of an ambiguous word. For example, the word 'idea' has
been used in two senses: (1). 'idea' refers to images. (2).
'idea' refers to concepts. A theory of ideas can thus be
two theories correspondingly, first, a theory of images which
is a theory in Psychology, second, a theory of concepts which
is a theory in Philosophy. Therefore a theory of ideas does
not necessarily mean a theory of images, nor does it
necessarily mean a theory of concepts. One has to look into
what it is about.

It happens the other way also. Apparently, it looks
that two theories are about different things, but in fact

they are about the one and the same thing. This happens when
we use two interchangeable words. In one sense of the term,
'idea,' it means concept. Locke tried to give a theory of
ideas. The theory is not about how an image is formed, but
rather how we form a concept. And we find different theories
about 'universals'. I believe, even the theories of universals
are also theories of concepts.

My belief that theories of ideas (in the above
specified sense) are theories of universals, and both of them
are the theories of concepts, is based on the following
grounds: I see that the subject matter of these different
theories are the same. They try to answer the same questions,
which are not in any sense ambiguous. They want to explain
one and the same fact that there are general words.

My belief is further strengthened by the following
fact. That a meaningful question can be asked about only those
things which belong to a category. I can ask meaningfully
whether a statement is true or false, but I cannot ask the
same question meaningfully about words. This I believe,
precisely because they cannot be treated as belonging to the
same category. I can ask the question meaningfully whether
a fruit is rotton, with respect to any fruit.

The theories of ideas, the theories of universals, and
the theories of concepts try to answer one basic question like

"What is virtue?" — a question about concepts. The same question may be asked, for clear understanding, in different ways. Aristotle, for example, asks the same question in a different form: What is that which is common to all virtues?

The same question which we have raised with respect to concepts e.g. how conceptual change is possible, can be meaningfully asked with respect to universals as well. Even in the realist theory of concepts who believe that universals are real and unchangeable, the question whether universals change can be meaningfully raised eventhough the question is trivial.

We can see now how the same question with respect to concepts we have raised can be raised with respect to universals. The question, 'How conceptual relations are possible?' will turn out to be, 'How universals are related?', with respect to universals. 'How two concepts are opposite concepts?' is the same question as 'How certain two universals do not exist in one and the same object?' 'How a group of incompatible concepts are possible?' turns out to be, 'How certain two or more universals do not exist in one and the same object?' The question, 'How can we define a concept in terms of other concepts?' is the same as, 'Can we define a universal in terms of other universals?' 'How vague concepts are possible?' will perhaps turn out to be, 'How unclear

universals are possible?' The question, 'What is the
relationship between a concept and its instances?' is the
same as, 'How universals exist in particulars?' The question
whether universals can exist in particulars, is the same as,
whether concepts are concepts of some objects.

There are a few questions perhaps which can be very
appropriately asked with respect to concepts but not with
respect to universals, for example, 'What is the role of
concepts in a logical theory?' Even if some questions that
can be meaningfully raised with respect to concepts in
exploring a theory of concepts, but not with respect to
universals, that need not make us  think that this difference
is a significant difference.  It is possible, an explorable
question, in a theory of concepts is, not an explorable
question in a theory of universals.  Thus, I take theories
of universals to be in effect theories of concepts.

## 9. Realism:

Realists hold the view that concepts (universals) are
non-mental.  For the realists, concepts exist in themselves
and would exist even if there were no minds to be aware of
them; if the world were exactly what it is now, with one
difference that it contained no minds at all, the existence
of universals would be uneffected.  They are public things

with which somehow mind comes into contact; and, a mindless world would lack not universals but only the knowledge of them.

There are many virtues, but what Plato wanted to discover  was the one and the identical form which they all have and by which they are made what they are.  The search, then is for one single  and essential form common to the things of the same kind, the form or essence because of which they belong to the same class.  It would apply to not only abstract concepts, such as 'justice' and 'courage,' but also to crude things such as 'tables' and 'chair'.  An object would not be a table unless it had the same essence ( of tablehood ) which all other tables have; despite the different shapes and sizes that individual tables may possess, there must be a single form or essence, common to them all, which is responsible for their being tables and distinguishes them from other objects.

For Aristotle, concepts (universals) are not substances existing independently of particulars.  They exist only as common characters in particulars. The concept of 'virtue' is nothing but whatever is common to or shared by all virtuous persons.  Individual objects are to be classified  into different kinds according to the common properties they share. These kinds are to be subdivided into species according to

the differentia the species have.

Realism in general misses the real point of conceptual questions like "What is virtue?", "What is justice?" etc. It holds the view that the answer to these questions lies in the essence of the concepts 'virtue' and 'justice'. And in fact the search for an essence is intelligible only in comparitively easier concepts. In the case of more complicated concepts like 'game', 'art' etc., one will fail to find any essence. There is no essence as such for these concepts.[4]

I do not see how an essence or differentium can explain the vagueness of concepts. Would the realist theory of concepts hold the view that a 28-year aged person shares less the essence of 'middle-aged' and a 50-year aged has the full essence? Or, that 28-year aged man has very imperfect form of 'middle-aged,' and 50-year aged man has comparatively a more perfect Form? To say this is to say precisely that they do not have the same essence or form. It does not make much sense to hold that there are degrees of an essence or a form of which a concept expresses. It is odd to say: Two tables have degrees of the essence or Form of 'tablehood'. Equally it sounds odd even to say that a table has the essence

---

4. Wittgenstein, L.: Philosophical Investigations, trans. G.E.M. Anscombe, (N.Y.: The Macmillan Company, 1968), Sect. 66.

or Form of a 'tablehood,' of an 'objecthood', of a 'colouredness' etc.  But, a table has to have all this since it  is at the same time, a table, an object and is coloured.

In the Realist scheme the construction of a concept becomes an impossibility.  Of course, one might acquire a concept by acquainting himself with that  concept, or by knowing that concept by any means.  A Realist would explain away the claim of Russell that he has constructed the concept of 'material implication', by saying that Russell has discovered that concept.  Concepts being real, they cannot be constructed; they can only be discovered.

Definition of a concept is possible, at best, in this scheme only in an ostensive way.  I cannot define a concept in terms of other concept(s), because each has a different essence or Form, and/or differentium.  Any definition of a concept in terms of other concept(s), according to realists, is bound to be defective; as in that case we will be identifying one kind of essence or Form, and/or differentium with some others.

Realists maintain that concepts (universals) are unchangeable in contrast with objects which are changeable. Conceptual change would thus be an impossibility for them. They do not face this question: How one can restrict or extend the use of a concept?  Realists are blind to the fact

of conceptual change, to the expansion or contraction of the area of their application.

According to the Realist theory of concepts it is impossible to account for conceptual relationships as demanded by the questions which we have raised earlier. Genus-species relationship at the conceptual level is impossible, eventhough it is possible at the perceptual level. If I say, the essence of a concept is part of the essence of another concept, that is ununderstandable. Moreover, if I say, a Form is part of another Form, that is also unintelligible. Nevertheless, the differentium of a concept cannot be the differentium of another concept; nor they can have an identical differentium because, in that case they cannot be the differentium of two concepts.

If one wants to seek an answer to the question above in a Realist theory of concepts, he must base his answer on perception of their objects, i.e. objects of two concepts which are under consideration. There is species-genus conceptual relationship between 'red' and 'colour', they would say; for, whenever I see a red patch, I also see a colour patch. That is to say that we form a habit, and we associate one concept with another concept because of our repeated experiences. The way we associate concept 'red' with 'colour' is not the same as the way we associate concept

'colour' with 'red', because we do not form the same habit
in the latter case, as we do not see red patch wherever we
see colour patch.  Thus, species-genus conceptual relationship
is perceptual, contingent, and therefore cannot be necessary.

The conceptual relation that a pair of opposite
concepts have, would also have to be grounded in experience,
according to the Realist theory of concepts.  The possible
answer is:  We repeatedly see that a married man is not
unmarried.  Thus, on the basis of our experience, we do not
attribute two opposite concepts to the same subject at the
same time.  It should **not** be an impossibility to attribute
two opposite concepts to the same imagined thing for realists.
Nevertheless, for the same reason, we do not attribute two
incompatible concepts to the same subject at the same time,
but we can do so about an imagined object.

The Realist theory has to interpret a case of category
mistake in the above line. If there are some objects, to
which a concept $C_1$ applies and if we have never experienced
that they are objects to which concept $C_2$ applies, then, to
think of them as being those to which the concept $C_2$ applies
is a category mistake.  For example, we do not see tables
walking on the road;  therefore, it is a category mistake if
I say "My table walks on the road".  However, such an

explanation has to admit that if we start perceiving the essence or Form or differentium of concept $C_2$ also in the objects of $C_1$, then they become the objects of $C_2$ also, and therefore, I can then predicate $C_2$ of those objects, without committing a category mistake.

The possible explanations which I have worked out to a certain extent here of some of the conceptual questions we have raised earlier, has to be grounded in experience in the frame-work of the Realist theory. However, such answer are very discouraging, for conceptual relations are necessary. Hume made an attempt to ground necessity in experience and had to own defeat.

If we can talk of word-meaning, it is the referential theory of meaning that one has to hold in the context of such a theory of concepts. A general word will stand for a universal, and a name for a particular. How do they manage to stand for a universal or a particular cannot be answered satisfactorily. Why do we not use the same name for two or more objects, why do we not confuse a name with a concept or a concept with some other concept, cannot also be answered satisfactorily. The only answer one might find is that the description or characteristics an object has, some other object or concept will not have. To say this is to make use of some universals in explaining a universal. A universal

is, therefore, different from other universals because, it
has other universals. One fails to understand such a language.
Moreover, how a word can manage to stand for an object in
the absence of the object cannot also be answered conclusively.

As we cannot have anything other than a referential
theory of meaning, predicating a concept to a subject will be
nothing but putting two words in a sentence where one stands
for a particular and the other stands for a universal.
Perhaps, a sentence meaning would be nothing but that which
indicates the relationship of a universal with some particular.

Whether or not to use a word, or to test whether a
use is correct, what we have to do, perhaps, is to only
verify the objects. If you know that certain particulars and
universals exist, then you can make a statement. Similarly
one who wants to test whether the use is correct, he will
try to know whether the referents exist. Perhaps, you make
a false statement according to this theory only when you
confuse a name of either a particular or universal with that
of another particular or universal.

An analytic statement, perhaps will be a statement
which contains only general words. But its truth cannot be
based on other than observation. You have to know whether
a universal is related with another universal in whatever way
one thinks of. That is to say analytic statements, which

are necessary are impossible.

The logical relationship between two or more statements are impossible. Even their relationship should be _via_ observation. You observe that a statement is true and other statements are also true. And at best you can come to the conclusion on the basis of your previous experience that whenever such statements are true, some other statements are also found to be true.

10. Resemblance Theory:

White **ob**jects are to be called white simply because they resemble each other in a way in which they do not resemble red objects, or blue objects, or hard objects, or spherical objects. There is a similarity between the wuite of the one and the white of the other, and the similarity might be anything from being virtually exact ( as in two new white clothes of the same factory) to being only approximate and generic ( as in two of white papers, which have different shades of white, one being bright, and the other being dull white. Bouwsma puts the Resemblance theory in the following words:

> "We notice some particular patch or some particular figure, and noticing some other patch or other figure, we see that the patches resemble each other and that the figures do. With this in mind we call the patches "white" and the figures

> "triangle". Now if some third patch resembles
> the other two in the respect in which they
> resemble each other, and a third figure likewise
> resembles the other two figures in the respect
> in which they resemble each other, then these,
> the third patch and the third figure, are
> described too as respectively "white" and "triangle".[5]

To make a distinction between two objects, I need at least two concepts. Both of the two objects belong to a concept and one of them belongs to another concept as well. If C is a concept, say 'object', and it has two objects $O_1$ and $O_2$, and $C_1$ is another concept, say 'red', and $O_1$ is red; then, I can distinguish between $O_1$ and $O_2$ with reference to the concept $C_1$ (red). I can say "$O_1$ is $C_1$" ($O_1$ is red) and "$O_2$ is not $C_1$" ($O_2$ is not red). Nevertheless, to say that $O_1$ and $O_2$ have some similarity, I need a concept ( C, i.e. 'object'). I must be able to know with respect to what they are similar eventhough I do not state it explicitly. If an object $O_3$ also is red, then I can say that $O_1$ and $O_3$ resemble each other with respect to redness. To find out in what respect two objects resemble, I must have a concept with respect to which they resemble. I will be able to say that two objects resemble each other with respect to redness only if I have a concept of 'red'. I cannot say that two patches

5.  Bousma, O.K.: 'Russell's Argument on Universals,' The Philosophical Review, Vol. 52, 1943, p. 194.

of a colour resemble each other with respect to whiteness, and therefore they are red. Resemblance theory thus holds: Two patches of a colour resemble in redness; therefore, they are red. But, I must know what is it to be having redness before I can find that the two patches of colour resemble each other with respect to being red. The problem before the theory was to explain the concept of 'red' and in doing that the theory is presupposing the very concept of 'red'.

I believe that the Resemblance theory of concepts, however, will be able to explain vague concepts. A person who is 58-year old will not resemble much an 'old man'; nor will he resemble much a 'middle-aged' man; therefore, it is not wrong if I call 58-year aged man old and middle-aged at different times. I cannot call that person at the same time old as well as middle-aged, because the concepts 'old' and 'middle-aged' are incompatible.

But in this theory any provision for construction of new concepts would not be possible. We cannot create new resemblances which are not present in the objects. If 'construction' means discovering the resemblances that two or more objects have, and which is unknown to human beings so far; it is possible. If 'construction' means to construct a concept which is not existing irrespective of whether human beings know it or not; it is impossible. Acquiring

a concept, according to this theory, is acquainting oneself with that concept, or having knowledge of that concept, and not really forming one.

Ostensive definition will, even here, be the only way of defining concepts. Definition of a concept in terms of other concepts becomes impossible; for, two concepts will consist in different resemblances. If a concept is defined in terms of other concepts, then, it is going to be certainly defective, as it will be nothing but defining one resemblance in terms of other resemblances.

Conceptual change becomes equally impossible. If objects, $O_1$, $O_2$ and $O_3$ have resemblances $C_1$, and therefore, they belong to concept $C_1$, and if $O_4$ does not resemble with $O_1$, $O_2$ and $O_3$, with respect to $C_1$, then, one cannot create a resemblance $C_1$ in $O_4$. For example, suppose somehow I manage to convert a wooden table into a wooden chair; then in no significant way this chair will be different from other chairs. It starts resembling with other chairs, and I need not have to extend the use of the term "chair" in order to include this chair under that concept. If $O_1$, $O_2$ and $O_3$ resemble one another, I cannot stop them resembling one another in order to restrict the use of the concept $C_1$. For example, the resemblances between the analytic and the synthetic statements with that of ethical judgements and

metaphysical statements are same ever since we have language. But, the Logical Positivists have restricted the uses of the terms 'true' and 'false' only to the analytic and synthetic statements. The resemblance theory has to hold the view that the resemblances which the analytic and synthetic statements have with ethical judgements and metaphysical statements have disappeared, when Logical Positivists restricted the uses of the terms 'true' and 'false' and now there are only resemblances between analytic and synthetic statements. Or, they have to hold the view that neither they have stopped resembling nor a new resemblance has appeared, but we have formed two new concepts which are also associated with the same terms 'true' and 'false'. Thus the words 'true' and 'false' are now ambiguous as they are associated with two concepts each, i.e. earlier conceptions and later conceptions of 'true' and 'false'. It has to be said that every time, when we restrict or extend a use of a word, we construct new concepts and associate those new concepts also to the same words which are used to express corresponding concepts, thus giving rise to ambiguous words. There can never be extension or restriction of the use of any word in this sense, and hence the phrase 'extending or restricting the use of words' is a meaningless. This conclusion is plainly false.

Conceptual relations will be nothing but empirical relations based on repeated observations. You observe that whenever you perceive a red object, you perceive a coloured object and you observe that whenever you perceive a yellow object, you perceive a coloured object. But you also observe that not necessarily whenever you observe a coloured object, you observe a red object, or an yellow object. Now, on this ground if one makes the generalization that whenever you perceive a red or an yellow object, you perceive a coloured object, then this will be based on experience. Thus you conclude that 'red' and 'yellow' are the species of 'colour'.

In cases of opposite concepts and incompatible concepts, you also make empirical observations. You observe that no one whom you have met is a bachelor as well as married. And thus you come to the conclusion that one and the same person cannot be bachelor as well as married. Therefore, the concepts 'bachelor' and 'married' are opposite. Nevertheless, you discover that some concepts are incompatible in the same fashion. You observe many red objects and learn that they are not yellow or green. You observe many yellow objects and learn that they are not red or green, and so on. You conclude on the basis of your repeated experience that if an object is red, then it is not yellow or green; and if an object is yellow, it is not red or green, and therefore, 'red,'

'yellow' and 'green' are incompatible concepts.

A category mistake will be committed when we consider an object to be having resemblances with some objects where in fact that object does not. A square root and a human being are said to belong to different categories, for they do not have any resemblances. We have never observed a man having some resemblances with a number, and vice versa. But the question why should we say that a sentence committing category mistake is meaningless but a sentence like "Winged h~se is healthy" is meaningful though we have not observed any horse having wings, cannot be answered.

In no way so far as word-meaning and sentence-meaning are concerned, the Resemblance theory will be different from that of Realist theory. Names stand for objects perhaps, and general words stand for certain resemblances or certain objects. For example, trees might grow and die, but if ten trees die that does not change the resemblances, there will be other trees which will have the same resemblances of treeness.

A sentence-meaning of the name-concept sort of sentences will be nothing but stating the place of an object in resemblance with other objects. For example, "X is red" means that 'X' stands in resemblance with other objects with respect

to redness. A sentence-meaning of a concept-concept sentence
will be nothing but a statement about repeated observations,
for example, "Red objects are coloured", that whenever we
see the red objects, we see coloured objects. Such statements
lack the logical necessity. Thus, even an analytic statement
which is also a concept-concept sentence will not be necessary
according to this theory. And the truth of analytic statements
also will be based on observations.

There cannot be logical relationships between different
statements as well. You can never say for certainty that if
certain statements are true, then certain other statements
must be true, for you can say this on the basis of your
repeated observations when such and such statements are found
to be true, such and such statements are found to be false.

Your criteria for using a word or to test the use of
a word will be empirical criteria. If your observable
criterion is satisfied, then you will say "X is red". In the
same fashion the one who wants to test the truthfulness of
your statement, will test it on the basis of observable
criterion. If the criterion is satisfied, then the use of
the word is appropriate, otherwise it is inappropriate. In
the case of the absence of observable criteria neither the
use of words nor their test of the appropriateness of the
use of words are possible. Possibly , a false statement has

to be one when one mistakes a resemblance to be some other resemblance or a name to be some other name, and make the statement.

## 11. Family Resemblance Theory:

The notion of there being (in some sense) something common to all instances covered by a single general word is true of only some words; it is not true of all, and that even the resemblances within a group of things all called by the same general name may be called only a Family Resemblance, overlapping similarities which one sees between different members of a group of things. Similarities might be anything from being virtually exact to being merely approximate and generic. If we find similarities $S_1$, $S_2$, $S_3$ in a group of things in different degrees $D_1$, $D_2$, $D_3$ ... ; then that will constitute a concept. Wittgenstein's own example is:

> "Consider for example the proceedings that we
> call "game". I mean board-games, card-games,
> ball-games, Olympic games, and so on. What is
> common to them all? — Don't say: "There must
> be something common or they would not be called
> 'games'" — but look and see whether there is
> anything common to all. — For if you look at
> them you will not see something that is common
> to all, but similarities, relationships, and
> a whole series of them at that ... Look for
> example at board-games, with their multifarious
> relationships. Now pass to card-games; here
> you find many correspondences with the first
> group, but many features drop out, and others

appear. When we pass next to ball-games, much that is common is retained, but much is lost."6

Family Resemblance theory has made improvements over the Realist and Resemblance theories, as this theory talks of a network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail. Family Resemblance theory is not for the search for essence; that enables it to explain such complicated concept like 'game' as well as easier concepts like 'red,' 'table' etc.

This theory, however, is also prone to the objection which we have discussed in connection with the Resemblance theory: it presupposes the very concept in explaining it. Why ball-games, board-games, and card-games are games? because they have a group of similarities overlapping and criss-crossing. Why do they belong to a group? Answer to this question must be sought in the very concept of 'game'. What makes some similarities form a group is a concept. If we do not consider them to form a group, we see that ball-games, board-games, and card-games etc., have similarities with a number of other objects. Why do we not call a war a game eventhough it has some similarities with games,

6. Wittgenstein, L. _Philosophical Investigations_, Sec. 66.

namely, that of having two parties, involving victory and defeats?

Family Resemblance theory is in no way inferior to the Resemblance theory in explaining the existence of vague concepts. A man aged 58 is not a clear case of a 'middle-aged' man as he resembles a clearly middle-aged man in lesser degree and only in a minimal manner. Nevertheless, he also resembles 'old man' in some degree and in some ways.

This theory can make an attempt to explain how a concept can be defined in terms of other concepts, as it gives up the persuit of essence and talks of only similarities. It can be argued that the concept 'game' can be defined in terms of 'ball-games,' 'board-games,' 'card-games,' which can be defined in terms other similarities overlapping and criss-crossing. But this argument is not in coherence with the position of Family Resemblance theory. Let A, B, C, etc., be different games. A is similar to B with reference to $S_1$ ; B is similar to C with reference to $S_2$. A is similar to C with reference to $S_3$ etc. Let all games of the kind A have $A_1$, $A_2$, $A_3$ etc. similarities overlapping and criss-crossing. Let all games of the kind B have $B_1$, $B_2$, $B_3$ etc. similarities overlapping and criss-crossing. And let all games of the kind C have $C_1$, $C_2$, $C_3$ etc. similarities. What constitutes the concept 'game' are similarities $S_1$, $S_2$, $S_3$

etc. And $A_1$, $A_2$, $A_3$ etc. similarities constitute concept 'A'; $B_1$, $B_2$, $B_3$ etc. similarities constitute concept 'B'; and $C_1$, $C_2$, $C_3$ etc. similarities constitute concept 'C'. Let us also suppose that one from the set $A_1$ ... is identical with or similars with one from the set $B_1$ ... so as to have similarity $S_1$; one from the set $B_1$ ... is identical with or similar to one from the set $C_1$ ... so as to have similarity $S_2$; and one from the set $A_1$... is identical with or similar to one from the set $C_1$ ... so as to have similarity $S_3$. Now, if I define concept 'game' in terms of concepts A, B and C, then what will constitute the concept 'game' is not only similarities $S_1$, $S_2$, $S_3$ etc., but the sets $A_1$ ..., $B_1$ ... and $C_1$ ... which also include $S_1$, $S_2$, $S_3$ etc. Thus, if we define the concept 'game' in terms of different types of games, then what we are doing is that we are defining 'game' in terms of the similarities which constitute different games (ball-games, board-games, card-games etc.); but not in terms of the similarities which constitute the concept 'game'. This is not what we wanted to define; we wanted to define the concept of 'game' in terms of $S_1$, $S_2$, $S_3$ etc., but have failed.

Let us consider whether the Family Resemblance theory can account for conceptual change. Consider the example of 'game' again. There is nothing common to all games, but they

have some family resemblances. Let different games be $G_1$, $G_2$, $G_3$ and let resemblance between $G_1$ and $G_2$ be $R_1$, between $G_1$ and $G_3$ be $R_2$, and between $G_2$ and $G_3$ be $R_3$. Then none of $R_1$, $R_2$ and $R_3$ exist in all the games, but they form a group or family. Suppose, I want to extend the concept. Then I have to introduce at least one more game, and let that be $G_4$. $G_4$ will be resembling with $G_1$, $G_2$ and $G_3$, and let the resemblances be respectively $R_4$, $R_5$ and $R_6$. Thus the unextended concept of 'game' consists of resemblances from $R_1$ to $R_3$, and the extended concept of 'game' consists of resemblances from $R_1$ to $R_6$. $G_4$ has the resemblances $R_4$, $R_5$ and $R_6$ with the objects of the unextended concept of game, as not only an object of unextended concept of 'game', but, as an object of extended concept also. Family Resemblance theory must explain how $G_4$, which was not an object of the extended concept of 'game' eventhough it had resemblances with objects of unextended and extended concepts of 'game', remaines the same. And, however, if the theory maintains that $G_4$ did not have any resemblances with $G_1$, $G_2$ and $G_3$ as being not an object of unextended concept of 'game', but, it acquired resemblances with $G_1$, $G_2$ and $G_3$ only when it became an object of extended concept of 'game', then the theory has to explain that how $G_4$ could acquire the resemblances with $G_1$, $G_2$ and $G_3$ which it did not have.

Moreover, Family Resemblance theory must make a provision to make restriction of the use of a concept possible. In the above example, if we restrict the use of concept of 'game' only to $G_1$ and $G_2$; $G_3$ will be no more an object of the restricted concept of 'game'. The unrestricted concept of 'game' claims that $G_1$ and $G_3$ have the resemblances of $R_2$, and $G_2$ and $G_3$ have the resemblances of $R_3$. Whereas, the restricted concept of 'game' claims that only $G_1$ and $G_2$ have some resemblances. How is it that $G_3$, which had resemblances with $G_1$ and $G_2$, has stopped resembling soon after I decided to restrict the use of the concept of 'game'? Are the resemblances just fictions of the human mind? This questions the theory cannot answer, or answer easily.

The Family Resemblance theory is in no way in a better position to answer conceptual questions regarding (1). the construction of a concept, and (2). conceptual relations. The same objections which we have raised against Resemblance theory holds good against this theory also. The construction of a new concept is impossible in this theory, for the reason that we cannot create new family resemblances. If 'construction of a concept' means coining a word by discovering a unknown family resemblances in some objects, it is possible.

Conceptual relations will be based on repeated experiences. You observe quite often that when a family of resemblances are

present in ball-games there are other family of resemblances
that are present with those games and other games. And you
also observe that whenever there are family resemblances of
card-games present, there are family resemblances of games
present.  You come to the conlusion that 'ball-games,'
'card-games' are species of 'games' because we do not always
observe that when you observe a game you necessarily observe
'ball-games' or 'card-games'.  Similarly you come to the
conclusion that 'ball-games,' 'card-games,' 'board-games' etc.,
are incompatible concepts because the family resemblances of
any two specific games are not found in any one game.

Moreover, you observe that the family resemblances of
straight lines are never found in the objects which have the
family resemblances of curved lines, and vice versa. Therefore,
you conclude that 'straight' and 'curved' are opposite
concepts.  Similarly, you also observe that when you perceive
the family resemblances of a concept belonging to one category,
you do not observe the family resemblances of the concepts
belonging to different categories.  For example, you observe
that the resemblances of the concept 'speak' is only present
in some human beings, but not in stones.  Therefore you
conclude that stones never speak and hence 'men' and 'stones'
belong to different categories.  If we say that a stone speaks,
then we will be committing a category mistake.

Is "Ball-games are games" an analytic statement for Family Resemblance theory of concepts? Suppose board-games with card-games have resemblance $R_1$, card-games with ball-games have resemblance $R_2$ and ball-games with board-games have resemblances $R_3$. ( I neglect other kinds of games for they will only complicate the example, but do not help us much.) In this case concept of game is constituted of three resemblances $R_1$, $R_2$ and $R_3$. Suppose foot-ball, volly-ball and a boy playing a ball by throwing against a wall have resemblance $R_4$ ( I neglect other ball-games). Then the concept 'ball-game' is constituted of the resemblance $R_4$. Now, what the statement "Ball-games are games" means is wherever $R_4$ is present $R_1$, $R_2$ and $R_3$ are present. This is plainly false, for if ball-games are 'games played with ball' ($R_4$) which resembles all ball-games, and if what resembles ball-games with board-games is 'rules are involved' ($R_3$), and if what resembles ball-games with card-games is 'winning and loosing are involved' ($R_2$), and finally if what resembles board-games with card-games is 'two parties are involved' ($R_1$), then, 'games played with ball' does not imply that 'rules are involved,' 'winning and loosing are involved' and 'two parties are involved,' for a boy might be playing with a ball by throwing it against a wall without any rules, without any parties, and without winning and loosing. At

best the Family Resemblance theory can hold that whenever we
have seen someone playing a ball-game, we have seen him
playing a game.  This will be nothing else than a generalization
on the basis of repeated experience.  Such a generalization
lacks the logical necessity which the statement "Ball-games
are games" has.  Nevertheless, the truth of such a generalized
statement will depend on repeated observations according to
this theory.

As Family Resemblance theory cannot talk of logical
necessity, it will face the same problem with respect to the
logical relationship between different statements. It has to
maintain that the argument "All men are mortal and Socrates
is a man therefore, Socrates is mortal" is valid because
we have found that X, Y, Z etc., are found to be men and are
found to be mortal.

## 12. Phenomenological Theory:

When we experience different objects belonging to the
same kind (concept), what we have is a similar experience.
All the experiences of tables form a group of similar
experiences. 'Similar experiences' might be anything from
being virtually exact as in the case of  those of two new
red postage stamps, to being only approximate and generic as
in a case of two flags widely different in shades of red,

one being bright and new, the other old and faded.  Whiteley
presents the thesis of Phenominalism thus:

> "The function of words is not to name everything
> we see or hear, but to pick out the recurrent
> patterns in our experience.  They identify our
> present sense-data as being of the same group
> or type as others which we have sensed before.
> A word, then, describes, not a single experience,
> but a group or type of experiences, the word
> "table" describes all the various sense-data
> which we normally refer to as appearences or
> sensations "of" the table.  So a material thing
> is not indeed identical with any sense-datum;
> but neither is it something different in kind
> from sense-data; and nothing but sense-data
> goes to constitute it."[7]

At best this theory has an epistemological advantage
over the other theories of concepts so far discussed. In
whatever way it differs from them, so far as its position
about how similarities (or similar experiences) are possible,
substantially it functions very much the same as the theory
of resemblance, or that of family resemblance, since it also
is based on similarily of experiences.  A Phenomenologist
uses the term 'experience of the same kind' instead of making
use of similarities or resemblances.  It has an added
disadvantage as it becomes more complicated without making

---

7.  Whiteley, C.H. : 'Phenomenalism,' in  A Modern Introduction
    to Philosophy, ed. Paul Edwards & Arthor Pap, (London,
    N.Y. : The Free Press, 1968), pp. 566-7.

new kind of experiences, then that is possible.  That our experiences are not always repetitions of the experiences which we have earlier, is very obvious. But having unfamiliar experiences does not necessarily lead us to construct a concept.

Definition of a concept in terms of other concepts will not be possible in this theory of concepts, for if we define an experience in terms of other experiences then that  means there is no difference between these experiences.  Suppose, I say that a good food is in terms of my experiences, that which is tasty, easily digestible and contains the required amount of protien, vitamines etc.  Then I have not defined what a good food is.  In order to define a word, perhaps, according to this theory is to do something similar to explaining in terms of our experiences or to provide the person who demands a definition to have a first hand experiences.

Conceptual change also becomes equally impossible in this theory as well.  If we want to restrict the use of the concept 'backward class' only to those who are culturally poor, or if we want to extend this concept to include even those who are not culturally poor but economically poor in order to make some national policies to bring them forward, we cannot do so, for our experiences of those people cannot change  overnight.  If our experiences of a backward class

person is such and such which includes only culturally poor persons, then we can never extend this concept so soon. We have to construct a different concept in the sense we have to find some similarity in all those who are economically poor. If our experiences of backward class persons is such that it includes even economically poor persons, then we cannot restrict the concept, if the government wants to make some policies on the basis of only cultural backwardness, because whatever similarities those people had they will not loose them overnight.

To say that we have to define a word in terms of our experiences is to hold the view that there cannot exist conceptual relations. The answer to the question why 'cat,' 'dog' etc. are species of the concept 'animal' will be in terms of experiences. The best answer we can provide is that whenever we experience catness in an animal we experience animality in it, and whenever we experience a doghood in an animal we experience animality in it. But whenever we experience animality in a living being, we do not necessarily experience catness or doghood in it. Therefore, 'cat,' 'dog' etc. are species of the genus 'animal'. And to say that 'kind' and 'cruel' are opposite concepts is to say that whenever we experience kindness in a man, we do not experience cruelity in that man, and vice versa. 'Red,' 'green,' 'black'

etc. are incompatible concepts because we do not find an object which is both 'red' and 'green' at the same time, though a green object turns out to be red and vice versa.

Analytic statements will be nothing but a generalized statement of repeated observation. 'Occulist' is an 'eye doctor' because, whenever we experience an occulist we experience an eye doctor and vice versa. Even analytic statements according to this theory cannot be necessary. As they are not necessary, their truth has to solely depend on our experiences. Perhaps, we can meaningfully talk of their probabilities. Analytic statements are more probable as they are based on greater number of observations.

The logical relationship of different statements will not be different in this theory from that of other theories we have so far discussed. This theory also has to hold that the argument "If all red objects are coloured objects and if X is a red object, then X is coloured object" is valid because we have seen repeatedly that red objects are coloured. Even the validity of arguments thus have to be grounded in experience.

## 13. Conceptualism:

According to conceptualism, universals (concepts) are mental or mind-dependent. For the conceptualist, universals

are in the mind in a <u>private</u> sense, such that if there were
no minds, there could be no universals, in the same way as
there could be no thoughts or memories or dreams. Conceptualism
concentrates on the fact that generality is an essential
feature of both experience and language, and it seeks to
answer the question how mental concepts are formed, how they
can be general if the data of experience from which they
are formed are particulars. Wood puts the thesis of
conceptualism in the following passage:

> "The object of my concept of a class of existent
> things — such as tables, books trees, man —
> is the totality of the members of the class. It
> is to be observed that the totality does not
> exist as an objective fact; the individuals
> exist, but they constitute a totality only for
> the mind which selects them. The selection
> <u>may</u> be arbitrary, but it is usually governed
> by a principle or purpose... Resemblance or
> similarity principle in the constitution of
> most if not all actual classes ... Individuals
> are selected by the mind to form an aggregate
> because of their resemblance in some significant
> respect, and thus resemblance has to be
> incorporated into the complete definition of
> conceptual objectivity."8

One significant difference, between Conceptualism and
other theories of concepts, from the point of view of a theory
of concepts, is that it attributes to mind the function of

---

8. Wood, Ledger: "Concepts and Objects," <u>The Philosophical
Review</u>, Vol. 45, 1936, p.372.

selecting the individuals so as to form an aggregate. Howesoever, the influence of search for essence on Conceptualism is evident because of which this theory also follows the same track as Realism does. Its primary aim becomes to answer the question: How can there be similarity? Had this theory tried to answer the question 'How do we select the individuals so as to form an aggregate?' without bringing resemblances or similarities (which presuppose the very concept which one is trying to explain), it would have had an upper hand in answering the conceptual questions regarding (1). conceptual relations, (2). conceptual change, (3). construction of concepts, and (4). definition of concepts.

Had this theory maintained that in having a concept the mind selects the objects of its group in the beginning arbitrarily and later it forms a convention to include those objects having such and such characteristics, then there would have been no presupposition of the same concept which it is going to explain, though it would presuppose other concepts and this concept would be defined in terms of other concepts. But as this theory makes the resemblances or similarities as the guiding principle, it has to presuppose the very concept in question in order to explain that concept. For example, in explaining why certain objects are red, this theory also has to presuppose that they have redness.

Eventhough the theory holds the view that qualitative resemblance depends partially on a comparing mind and partially on the structure of the objects, it cannot explain how an object which does not have any resemblance with all other members, be a member of that class. For example, how different games which do not have resemblances but only family resemblances be members of the concept 'game'?

This theory cannot explain how one can extend or limit the use of a concept. If the extended use also had resemblances with the members of the unextended concept, in that case I have not extended the concept, but by some mistake I had not included them earlier. If those objects which now are covered by the extended concept did not have any resemblance with the members of the unextended concept, it has to be explained how they have grown resemblances which they were not having earlier. Similar objection holds good when we restrict the use of a concept.

Conceptual relationships are impossible in the sense our questions demand. According to this theory, I believe, the relationships that any two concepts can have are perceptual relationships. We observe that some concepts have the species relationship with some other concepts only when we repeatedly see that whenever some objects have certain resemblances, we also see that they have certain other resemblances as well,

but not vice versa. On our experiencial ground we come to the conclusion that 'mango,' 'banana' etc. have the species relationship with the genus concept 'fruit'. Similarly we find that 'red,' 'green,' 'yellow' etc. are incompatible concepts because all of them cannot be found in an object at the same time. The same is the case with opposite concepts and concepts belonging to different categories. Their relationships also have to be based in experience.

As this theory holds that there will be some resemblances among the instances of a concept, irrespective of the reasons how we have resemblances, it cannot explain how analytic statements are possible, for analytic statements are statements involving only concepts. The relationship between a resemblance of all members of a concept and a resemblance of all members of another concept is empirical according to this theory; then this theory cannot explain how truth of analytic statements do not depend on empirical facts. Analytic statements are statements based on our repeated observations that whenever certain resemblances in certain objects are present certain other resemblances are found in those objects. Analytic statements can be said to be more probable in comparison to other statements involving names as well.

As this theory fails to explain how analytic statements
are possible, this theory, I do not think can explain how
there can be logical relationship between premises and the
conclusion of a valid argument.  A valid argument, perhaps,
will be one in which the relationship between premise and
conclusion is more probable.

## 14. Nominalism:

The Nominalist view, that only names (or, more generally,
words) are universal, for the things named are all singular
and individual.  Universals are terms or signs standing for
or referring to individual objects and sets of objects, but
they cannot themselves exist, for what exists must be an
individual, and a universal cannot exist.  Its primary aim
is to answer the question how general words are possible.

In its extreme form it holds that there is nothing
common in a group of particulars called by the same name.
A group of particulars are tables only because they are
called "table", and no other justification is needed or
possible.  This theory does not find the need of hypothising
'concepts' in between words and particulars.

In its modified form, however, it tries to answer
the question regarding generality by saying that a group of
objects are called "tables" because they have some similarity

or resemblance. For example, Hobbes holds the view that one universal name is imposed on many things, for their similitude in some quality or other accident.

Extreme form of Nominalism, thinks that even generic names (concepts) are just names. It tries to put forth the thesis that generic names are there because we use the same name for a number of objects. Here is a primary confusion regarding the nature of names and concepts. They treat names and concepts as belonging to the same category. Therefore, this theory can be attacked at a different level.

This theory also presupposes a concept before making an attempt to explain it. Our calling different objects as belonging to a 'group' itself presupposes a concept; and we call these objects "table" because we have the concept of 'table'. If I start calling a pen a "table" it will not be a table. Thus, the position of Nominalism does not add any extra advantage in answering the conceptual question why different objects are called "tables". The theory has no philosophical competence to answer any one of the other conceptual questions which we raised earlier.

The modified theory of Nominalism bases its theory on similarity, or resemblance, as other theories do. One might say that this theory also can explain well the functioning

of vague concepts.  But, it also faces the same difficulty as others do in explaining how: (1). concepts can be constructed, (2). concepts can be defined, (3). conceptual change is possible, and (4). conceptual relationships are possible.

Perhaps, constructing a new concept for this theory will be to have a different name.  A name cannot be defined in terms of other names; therefore the question of attempting how can we define a word in terms of other words does not arise.

If one asks how there can be any conceptual relationship between any two or more concepts, this theory has perhaps to say that there is one more universal which connects these two concepts.  This leads to two objections: (1). The act of explaining a relationship between two concepts in terms of a third concept leads to ad infinitum. (2). Even if two concepts are related by a third concept that can at best give rise to a synthetic statement which makes use of the similarities they have.

As there cannot be any provision for analytic statements in this theory, the possibility of its explaining why truth of analytic statements do not depend on facts, but on their meaning does not arise.  This theory also fails to explain how the use of a concept can be extended or restricted as this theory holds the name theory of meaning.

We can go from one concept to another concept provided there is some conceptual relationship between them. For example, if I know that something is red, I can very well say that it is coloured. But this is not possible according to this theory. For the same reason, according to this theory there cannot be any provision for knowing the truth of a statement by knowing truth of some other statements which have some logical relationships.

# CHAPTER III

## CRITERIOLOGICAL THEORY OF CONCEPTS

1. Basic Features of a Concept:

To begin with, it will be very fruitful to distinguish between three factors of any concept. I would prefer to call them: (1) form , (2) content, and (3) accidental features. I am introducing these three elements in order to make the discussion more fruitful. By 'form' of a concept I understand the necessary conditions for any concept to be a concept. For example, a concept must be concept of something. This is common to any concept. Form gives the minimum conditions which ought to be present to have a concept. By 'content' of a concept I mean the meaning of a concept, which makes it different from other concepts, though a content is a must to have for a concept. Every concept must have some meaning, but each concept differs in meaning from others. (Words have meaning because they are associated with concepts/ names.) By 'accidental features', I understand those features of a concept which generally go with it, but they are not a must for it. The question whether the verbal expression "colour" or "color" must be used to express the concept of 'colour' is a question about an accidental feature of a concept.

Are these three features of a concept mutually exclusive? They are, for the reason that, whatever is the form of a concept cannot be an accidental feature of that concept and vice versa, by definition. Whatever is formal cannot be the content of a concept, for two concepts always have the same form but they can never have the same content. If they have the same content, then they cease to be two concepts. Any accidental feature cannot make to two concepts different from each other. For the same reason, whatever is the content of a concept cannot be its form. A content of a concept is a necessary feature of concepts; we cannot have a concept without having content of it, whereas, an accidental feature is by definition not necessary, and thus, content and accidental features of a concept exclude each other.

## 2. Accidental Features:

We have seen that verbal change is not a real conceptual change. It might bring change in the suggestive meaning of the word, but not in its cognitive meaning. And it might equally bring a change in emotive meaning also. A case of verbal change is not conceptual change also because the same function a concept can perform even when expressed by the changed word.

It is conventional that we use certain expressions to express certain concepts. This convention can be broken, and a new convention can be started. This is what happens when we have a case of verbal change.

Suppose, I have constructed a concept and I need a word to express the concept in language, so as to communicate my concept to others. I can start a convention by using a word arbitrarily chosen. Many times we choose a word according to some guidelines a language in general gives. I do not choose a word belonging to some other language to express my concept in English, for it creates certain practical difficulties, but if I am very particular about it, or I find English does not have an appropriate word, I can do that.

If I am not careful enough in choosing a word to express my concept, or start a convention, then I may unnecessarily make a word ambiguous. If a certain word is already taken to express a concept by convention, and if I also use the same word to express my newly constructed concept, then, I am making that word ambiguous. It is always good to avoid the use of same word to express two different concepts.

To have a concept, I do not necessarily have to associate it with a particular word. But later on when I need to communicate it to others, I have to do that. Many times, we express a newly constructed concept by putting down

the criterion/criteria of its use in sentences.

It is also a mistake if one thinks that every concept must have as its object (an instance of that concept ) something which is real. By real object, I mean, an object which is perceivable by any body by any sense organ, if certain conditions are fulfilled. Even if all tigers die, we can still have the concept of 'tiger'. Many philosophical concepts do not have any real instance in this sense. For example, Kant's 'thing in itself' does not have any real instance. It might be argued that we cannot have even an imaginable instance of a 'thing in itself', therefore it is logically impossible to have the concept of 'thing in itself'. However, this argument can be refuted by giving an example of a concept which has no imaginable object. No human being can have ultraviolet images, since the human eye is not sensitive to that part of the spectrum; bees and certain other creature can see it, but we cannot. But, we do have a concept of 'ultraviolet'.[1] It is just accidental that certain concepts have imaginable or real objects.

If our analysis is correct, then one thing that is obvious is that resemblances, or similarities in the real or

---

1. John Hospers: An Introduction to Philosophical Analysis, (Bombay: Allied Publishers Private Ltd., 1971), p. 107.

unreal objects, are just accidental features of concepts.

The grammar of a language has nothing to do with concepts. Many concepts have different words associated with them in the same language; e.g., synonymous words, or equivalent words in different languages ( the equivalents of "table" in other languages). When we use a word in a sentence of a language, it will be used according to the grammar of that language. This is revealed when we translate a sentence from one language into another. If a sentence consists of three words in English and if I translate each word into Hindi and keep them in the same order, not necessarily the translated sentence in Hindi will be meaningful, for it might not be according to the grammar of Hindi. Grammar is applicable  to words or sentences  but not to concepts ( or names) which are associated with them. Therefore, grammar is an accidental feature of concepts.

## 3. Content of a Concept:

Content of a concept can be rightly said to be the meaning of that concept. Meaning of one concept differs from that of any other concept, otherwise there is no reason to call them different concepts, and there will be nothing by which one can differentiate them, except their accidental features. To put it in other terms, all the particular

linguistic activities that one can perform with the help of
a concept cannot be performed with the help of another concept.

It is likely that we are mislead when we consider
synonymous words. For example, "cruel" and "unkind" are
synonymous words. And almost wherever 'cruel' occurs in a
sentence, we can replace it by the term "unkind" without
bringing any change in the meaning and truth value of the
sentence. The words "cruel" and "unkind" have different
suggestive and emotive meanings. Thus, one might think that
"cruel" and "unkind" are different words, and therefore must
be expressing different concepts. But do these two words
have different cognitive meanings?

To hold that two words have different cognitive
meanings is to hold that they express different concepts. And
further, to hold that they express different concepts, is to
hold that they can be used to perform different linguistic
activities. A set of different linguistic activities
which a concept can perform cannot be performed by the
other concept. We also hold that two synonymous words have
the same meaning (cognitive) and therefore, any one of them
can be used to perform the linguistic activities which we
want to perform with the help of the other. This is to say
that two synonymous words have the same use, and therefore
express the same concept. Thus, "cruel" and "unkind" express

the same concept but they have different suggestive and emotive meaning.

If our position is correct, then the concept which two synonymous words express must have the same logical relationships with other concepts. This is true. If one synonymous word stands for a species of a genus, then the other one would also stand for the same species. If one of the two synonymous words is the opposite of a third word, then the second also would be the opposite of that word. For example, if "unkind" is an opposite of "kind", then "cruel" which is a synonym of "unkind" also is an opposite of "kind". If I know that a word has two antonyms, then I can say that those two words are synonymous. If one of the two synonymous words is incompatible with a third word, then the other one also is incompatible with the latter. And if one of them belongs to a category to which the third does not, then the second also belongs to a category to which the third does not.

We can talk of synonymous words, because two words can have the same cognitive meaning, and they can express the same concept. But, we cannot talk of two synonymous concepts, because if they are two concepts, they would not have the same meaning, or would not be usable to perform the same speech acts.

inquire into the form of a concept, i.e., factors which are necessary to make a concept a concept.

## 4. Form of a Concept:

Why do we want to acquire concepts? Concepts are acquired to make possible the acquisition of knowledge. Knowledge is impossible without concepts. Knowledge consists in identifying or and differentiating.  When I understand that this is a table, I am understanding it as belonging to the group of things called tables and at the same time as not belonging to some other groups.  We need concepts to identify or differentiate.  When I say this is a table, I only identify this object belonging to the concept of table, and when I say this is not a chair, I am differentiating this object from the objects that belong to the concept of 'table.' But, when I say, this is a straight line, I not only identify it as an object belonging to the concept 'straight line; but also  differentiate it from the curved line;  I do both identification and differentiation here. Similarly when I use one of the members of a group of incompatible concepts, not only I identify an instance of it as belonging to the concept, I differentiate the object from the objects which belong to the other pole of incompatibility.

How do we manage to identify or differentiate an object belonging or not belonging to a concept? There must be certain grounds on the basis of which we identify or differentiate objects as belonging or not belonging to a concept. These grounds are the criteria of a concept.

I compare a criterion of a concept with a measuring instrument. A criterion very importantly works like a unit of measurement. The metre is defined as the distance, at the melting point of ice, between two points on a platinum-iridium bar at the International Bureau of Weights and Measures in Paris. Metre is taken to be a unit of measurement. We know how to measure the length of a pice of cloth in terms of this unit. If someone asks me, what is the weight of a book, I cannot apply this unit of measurement in this case. I understand the limit of my unit of measurement as I fail to use it. I might find out another unit of measurement for weight, say a gram. I can measure the weight of a book in terms of grams. I can now differentiate this length of the book from its weight. I do not use grams for measuring length, and metre for weight. The fact that I have learnt to distinguish length from weight of an object indicates that I have learnt to identify the instances of 'metre' and 'gram'.

'Density' has its own measurement, i.e. ... grams/c.c.
The unit of measurement of density is in terms of unit of
measurement of weight divided by unit of measurement of
volume. And further a unit of volume is in terms of unit of
length into breadth into height, which can be measured in
terms of only one unit of measurement, e.g. metre. Thus,
if we have a unit of length and a unit of weight, we can
have a unit of density.

A concept must have a criterion/criteria, and criteria
behave like units of measurement. A concept can have a
criterion in terms of criteria of other concepts as the unit
of density can be stated  in terms of the units of weight
and length. For example, 'death' has many criteria.  They
are (1). when somebody's heart  stops beating, (2). when
somebody's pulse stops beating, (3). when someone  stops
breathing for a considerable time, and (4). when the
temparature of a body is above 115$^O$ F, or (5). below 70$^O$F
etc. If a body satisfies any one of the criteria, then one
can safely declare him dead. 'Heart,' 'pulse,' 'breath' etc.
themselves are certain concepts.  They have certain other
criteria. 'Stop' itself is a concept and has its own criteria
as well. Thus the concept 'stop of heart beating', or
'stop of pulse beating' or 'stop of breathing' which have
the criteria of 'stop' and 'heart beating', or 'pulse beating,'

or 'breathing', constitute the criteria of 'stop of heart beating', 'stop of pulse beating' and 'stop of breathing' respectively. All the criteria of these concepts will be criteria of the concept of 'death'. The concept 'death' and these concepts have genus species relationship.

For certain concepts we do not find a criterion which is not also criterion of any other concept. But still a concept of this type remains different from others for the reason that all of its criteria are not criteria of another concept. Either they will have one criterion less or one more than the criteria of that concept. For example the difference between two concepts 'first class student' and 'second class student' is due to only one different criterion belonging each. Suppose C, D are two criteria of the concept 'student', then the above two concepts have the set of criteria as following: (1). 'First class student' has the criteria C, D and the one who has scored more than ...% in an examination , (2). 'Second class student' has the criteria 'C, D and the one who has scored less than ...% and more than ...% in an examination .

Moreover, we find that there are concepts which do not have any genus-species relationship with any other concept; and they do not have their own criteria, but manage to have one by borrowing some criteria from some different

concepts. For example, the concept 'handicapped boy', borrows a criterion from two concepts namely 'handicap' and 'boy'. Suppose the concept 'handicap' has two criteria say, A and B, and the concept 'boy' has two criteria say C and D; then the criteria of the concept 'handicapped boy' has four criteria, namely (1). A and C, (2). A and D, (3). B and C, and (4). B and D. One criterion of 'handicap' and one criterion of 'boy' will form a criterion of the concept 'handicapped boy'. A human being who satisfies a criterion of 'handicap' as well as a criterion of 'boy' satisfies the criterion of 'handicapped boy'. 'Handicapped boy' is not a genus of the concepts 'handicap' and 'boy', as there are handicapped persons who are not boys and there are boys who are not handicapped. ( Of course, 'handicapped boy' can be treated as sub-species of two concepts i.e. 'handicap' and 'boy', but the question under consideration was whether the concept 'handicapped boy' has its own criteria by virtue of its being genus of the concepts 'handicap' and 'boy'.)

The criteria of a concept determines the linguistic rules for the meaningful use of the word which is associated with that concept. A meaningful use of a word covers its appropriate and inappropriate uses. It is appropriate to call a man of 20 a youth, but it is inappropriate to call him an old man. The first one gives rise to an appropriate

sentence, and the second gives rise to an inappropriate
sentence. The criterion of the concept 'youth' will not,
for example, allow us to call a table a youth. We can use
or make an attempt to use a word in whatever way we like,
but if the use is according to the criterion of the concept
which is associated with the word, then it would be a
meaningful sentence, and if it is not according to the
criterion and symptoms then it becomes meaningless.

## 5. A Criterion Starts a Convention:

Recall the analogy of a unit of measurement. What
made a rod of certain length kept at Paris at melting point
of ice a metre? The answer to this question is that we
have decided to call it or use it as a metre. Thus we have
started a convention. Similarly we have started another
convention which has given us a 'foot'. Similarly, when
we form a concept, we start a convention of taking something
as some criterion or criteria of a concept. Many times we
have certain objects in mind and we want to group them
together, and we can do this only less providing certain
criteria which includes only those things and excludes
all other things. For that we take certain things, whatever
they may be, as the criteria of that concept. What we want
to include in a concept might be something perceivable, or

something which is imaginable or it can be only conceivable
e.g. X-rays.  As criteria start conventions, one can very
well break a convention by **flouting** the criteria.  But by
breaking a convention a man starts a new convention or
creates a chaos.  Therefore, if I want to change the concept
of 'philosophy' by breaking the existing convention, say,
**if** I do not call metaphysics a branch of philosophy, what
I am doing is starting a new convention, say that of Logical
Positivism.  What has happened here is that I construct a
different concept of 'philosophy'. My concept of 'philosophy'
will be different from that of others.  Thus, it is proper
to say, once we start using a convention, we cannot break,
but we can give it up.

## 6. A Concept must have some Objects:

Suppose, that a concept has no objects. Where will
this presupposition lead us to?  One thing that follows from
this is that we cannot predicate it to any subject
appropriately.  So what? One can at least predicate it to some
other subject and have a false sentence.  But this is not
possible if a concept has no objects, for in that case the
concept has no criteria.  Why can't we think of a criterion
which has no application, or has no use?  This is because
the need for criterion is there only when there is a use. We

cannot formulate a criterion for nothing. We need criteria
only when we want to group together certain things, and to
do that we need criteria otherwise we would not need criteria
and therefore there is no point in having them. If there
is only one object, we do not need to group, therefore we
do not need any criteria for it. Therefore, we cannot talk
of a concept of only one object. We cannot have a concept
of earth, for we have only one earth. But knowledge of the
earth should not be confused with that of the concept of
earth. Having knowledge of a concept also can be said to
be knowledge, but my knowledge of Mr. X is not my knowledge
of the concept of 'man'.

The second thing that follows from the presupposition
of a concept having no instances will be that we cannot have
a concept without some objects. A concept having no instances
of it can be used, let us suppose, wrongly to other objects
and have a false sentence. What makes me say the instance
is not an instance of this concept? That I can do only if
I am able to distinguish the instances of this concept from
the instances of other concepts. Therefore, in presupposing
that we can have a concept without having any instance of
it leads us to the presupposition that that concept has
some instances.

The third thing that follows from the supposition
that we can have a concept without having any instance of
it is that we can have a meaningless concept, i.e. we can
have a concept which has no criteria. When there is no
instance, I do not need a criterion at all, and if I do not
need a criterion, then the question of finding whether the
use of the concept is proper or not does not arise. A
concept which has no criteria has no linguistic rules. If
there is a linguistic rule for the use of a word, then it
also has a set of criteria to testify whether the use of
the word which is associated with the concept is according
to the rule or not. Thus, the supposition that a concept
has no objects leads us to the position that we can have a
concept without any use or meaning, thus  ommitting the
concept itself.

## 7. A Concept is for Someone:

We have seen that one must start or own a convention
of taking something as a criterion in order to have a concept.
Only a human mind has this capacity to take something as a
criterion for a concept.  To say this is to say a concept
is only for human being.  Its use involves a convention and
there must be some human being to start, own or even to
modify a convention.  In virtue of this capacity which a

man has, he can restrict a concept or extend it by modifying the convention which he has made for himself or somebody else has made it for him. We may not know who started the convention. Modifying a convention should not be taken as modifying a criterion.

To say that a concept is constructed by someone does not mean that others cannot acquire that concept. Any man can own it, and he who wants to acquire it, he has to follow its proper conventions and has to use it in accordance with its proper criteria.

Let us see how far the Criteriological theory of concepts is satisfactory by examining answers to the question which any satisfactory theory of concepts has to answer.

8. Vagueness:

The criteriological theory holds that vague concepts are there because between two or more incompatible concepts which are species of the same genus we do not have the precise criteria of demarcation. To say that something is imprecise is not to say that it is vague.[2] When we have constructed a group of incompatible concepts, we have not decided their criteria properly. We do not need sometimes such a sharp distinction. A man of 58 years can be treated

2. Alston, W.P. : Philosophy of Language, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965), pp. 86-7.

as belonging to 'middle-aged man' as well as 'old man' at
different times. But why at the same time we cannot say
that he is both old and middle aged is because 'middle-aged
man' and 'old man' are incompatible concepts of the **same genus**.
Vagueness can be removed by formulating the criteria more
precisely of all those concepts which are incompatible, say,
by deciding that a man who has completed 60 years is an
old man and one who is in between 60 and 40 is middle-aged,
etc.

## 9. Definition of a Concept:

When we define a concept what we do is nothing but
to give the relevant criteria of that concept. And many times
people give some one criterion and neglect some other leading
to a too narrow definition. And if I give a criterion of
some other concept, it gives rise to a too wide definition,
for the criterion which I give may cover other concepts
as well. For example, if I define 'red' in terms of the
criteria of 'colour' it will be a wide definition, for the
criteria cover not only red objects, but also green objects.
If I define a concept by giving one criterion where the
concept has more than one criterion, then it is going to be
a too narrow definition for it ignores the objects which are
to be covered by that concept via some of its other criteria.

For example if I define 'man' as the one who can speculate, then I am excluding the people who cannot speculate from the class of human beings, say, mad people.

We have already seen that we can have the criteria of a concept, which is not of its own, but of its species. And also some times a concept can have the combination of two sets of criteria of two different concepts as its own set of criteria, e.g. 'red pen' has its criteria consisting of a combination of the criteria of 'red' and of 'pen'. Therefore, when I define 'red pen' I must define it in terms of 'the one which is red as well as pen'. Thus, it seems obvious that the Criteriological theory can successfully explain how some concepts can be defined in terms of some other concepts.

10. Genus-Species Relationship:

A genus is a more general concept. It has many criteria. Generality of a concept cannot be said to be based on how many instances it has. It need not be general in this sence. For example, the concept of 'star' is a concept with uncountable instances, but this concept is very precise. Generality of a concept depends on how many species it has. If a concept has many species and, further, those species have their own sub-species, then the concept

is very general. To be precise, a concept which has many
criteria or many levels of criteria, is more general than
another which does not. In comparison with such a concept,
one which has a more simple set of criteria is relatively
more specific.

A genus-species relationship will be there where all
the criteria of at least two concepts are the criteria of
a third concept. The third concept will be the genus and
the first two **species.** If two or more concepts are species
of a genus then they must be incompatible concepts, for if
they are not, then they cannot be species of the same
concept. Any two concepts which are compatible will not form
species of any concept, for in that case the two concepts
do not lie at different points of the unit of measurement
the genus has.

11. Opposite Concepts:

We can have a pair of opposite concepts only if they
are species of a genus. When a genus has even only two
species, it is bound to give rise to opposite concepts, for
the species will form a group of incompatible concepts. If
the criterion of the genus is satisfied, and if I know that
the criterion of one of the species is not satisfied, then
I can say for certainty that the criterion of another species

has been satisfied. For example, if I know that X is a line and in addition to it if I also know that it does not satisfy the criterion of 'curved line' which is one of species of 'line'; then I can for certainty say that it is a straight line. This is possible because if all the criteria of genus are nothing but the aggregation of the criteria of species and if there are only two species of that genus, then if I know that the criteria of genus is satisfied and the criterion of one of the species is not satisfied, it ought to be the case that the criterion of the species is satisfied.

## 12. Incompatible Concepts:

Suppose I construct a concept such that the constructed concept also will be the species of the genus of two opposite concepts. What we will then get is a group of incompatible concepts. A group of incompatible concepts are in no way different from the pair of opposite concepts except that there is some difference in the number of species of the corresponding genus. This difference brings about some other difference in the way these concepts behave. For example, if G is a genus and $S_1$, $S_2$ and $S_3$ are three species of G, then they are incompatible concepts. And if I know that certain instance of G is present i.e. a criterion of G is

satisfied, and further I know that the criterion of $S_1$ is
not satisfied, from this I cannot say that the criterion of
$S_2$ is satisfied, for possibly the criterion of $S_3$ is satisfied.
But this does not happen in the case of opposite concepts,
for then there are only two concepts.

13. Category Mistake:

A geometrical concept is defined in terms of some
different geometrical concepts, and an ethical concept is
defined in terms of some different ethical concepts. That
is to say, a criterion of any concept which belongs to
geometry is not defined in terms of the criteria of ethical
terms or vice versa. In other words, a criterion of a
geometrical concept is not taken from that of an ethical
concept, and vice versa. One might propose to construct
different concepts in order to bridge the gap between
different categories. But this is impossible for the reason
that basic concepts of the two categories do not have any
common criteria. Other concepts of a category are defined
in terms of its basic concepts. Therefore we do find a gap
between the concepts belonging to two different categories.

Whenever an object belonging to one category is
treated as belonging to another category, then there will be

a mistake of misapplying the relevant criteria. In other words, if an instance of a geometrical concept is treated as an instance of an ethical concept, the result will be a category mistake.

14. Conceptual Change:

The fact that concepts change is not free from all doubts. Those theories of concepts which hold that concepts are permanent will come forward with some such arguments:

$A_1$: The objects of a concept are unlimited. Concept 'media of communication' has the disposition to accomodate all the invented media e.g. radio, TV etc. and even all forthcoming inventions which will be used for communication.

$A_2$: There is no instance of conceptual change. A word can be associated with any concept. What happens when we extend a concept is that we formulate a new concept; and similarly when we restrict a concept we formulate another concept. But unfortunately the word remains the same for all the three concepts, extended, unextended and restricted. People mistakenly think that there is a conceptual change.

$A_3$: Conceptual change can be there only if an earlier concept disappears and a new concept appears in its place. If both the concepts can exist in use, then there is no

conceptual change. Even a single example of this sort will disprove the thesis that there is conceptual change.

$A_4$: Concepts might be forgotton, forbidden, but cannot be changed. We might not find or need certain concepts in a society and a concept might be forgotton, and similarly, there might be some forbidden concepts, people not wanting to use them. If certain concepts are forgotton or forbidden that does not mean that those concepts have changed. They can be memorised and revived once again if someone wants them.

Argument $A_1$ can be refuted by saying that it is not a case of conceptual change. When we say that there is a case of conceptual change, we do not mean that there is change of criteria. A case where there is change of criteria is not a case of conceptual change for in that case we have formulated a new concept. If there are two concepts with different criteria then they are two different concepts; therefore there is no reason to think that one concept has changed into another.

Argument $A_2$ is considering a case when two or more concepts are associated with one word. This is a case of an ambiguous word, but not a case of conceptual change. And $A_4$ can be refuted by saying that the cases of forgetting,

forbidding, concepts are not cases of conceptual change, and in no way it is related to conceptual change.

$A_3$ is put forth as an argument on **the** analogy of change in physical objects. A piece of wood might be burnt and turned into ashes; it then does not remain the same and has changed. But this analogical argument does not hold as concepts are different from the things or objects, as they are different in nature.

A case of conceptual change is difficult to detect if one is not very careful. When there is change of criteria, in that case there is no conceptual change but a construction of a new concept or murger of this concept with an existing concept. When we extend or restrict a concept, we do not change the criteria; if we have changed the criteria then we have not changed the concept. When we extend a concept, we do not change the meaning of the concept, nor do we change the meaning of the concept when we restrict. In a case of conceptual change, there is change in the descriptions which determine the use of a criterion. For example, when Mayo restored the concept of 'true' and 'false' to the ethical judgement, he has only changed the descriptions that were involved in the use of a criterion. He tries to show that we can say that an ethical judgement can also be true. What Logical Positivists say is that ethical statements cannot be

true or false. For a Logical Positivist only indicative sentences are true or false, but not emotive ones. What Mayo did was not to change the meaning of the term 'true' or 'false'. He tried to show that whatever differences an ethical judgement had from an indicative sentence was unimportant to the concept of truth, and therefore there was no reason to think that an ethical judgement should not be called true or false.

When we extend the use of a word we cover even those areas of its use which in fact are not covered by the use of the criteria of the concept expressed by the word. The modern conception of grammar has extended the old conception of grammar. The old conception of grammar does not include semantic  aspects of words, but the extended conception does. But in all such extensious of the meaning of a word there is no change in its meaning  because there is no change in the criteria which constitute the relevant concept.

activities that we do with the help of names.

The act of naming should not be taken to be solely the acts of religious, social or political activity. In a section of Indian society, the act of naming a new born child is a part of a religious ceremony. This religious ceremony is the combination of many activities, but the primary one is the act of naming the new born child. The activity of naming might have some religious purposes as well. Naming a social institutions like schools and colleges is very common in a society. Nevertheless, important political leaders visit certain places for putting the foundation stone and to name the institution, dam, factory etc. What the motivations are behind acts of naming does not interest us.

What I propose to show is that without the act of naming or names, it is logically impossible for us to do at least some linguistic activities under certain circumstances which we manage to do with the help of proper names. This I propose to do by showing that we cannot do away with proper names, as against the belief that names can be replaced by definite descriptions for all logical and practical purposes.

## 2. Referring Function of a Name:

We make use of a name in most of the cases when we want to refer to only one object. "Mount Everest," "Taj Mahal"

refer to the Mount Everest, the Taj Mahal respectively.  We
may need to refer to only one object when we want to describe
it rightly or wrongly, or ask questions about it, or to ask
someone to bring some change in it, etc.  Let us see that
in how many ways we can refer to only one object.

(A). Logically Proper Names:

Russell has talked of logically proper names.  He
considers "this," "that," etc. as logically proper names.
They are logical in the sense that they are not names, but
in a context they perform the logical function of a name i.e.
that of referring to only one object.[1]

In a context, where we have common perceptual field,
we can successfully use the so called logically proper names.
I can refer to a song and communicate to my friend my opinion
about that song if both of us are listening to it, or to an
object which both of us see, etc. by making use of the logically
proper names like "this," "that" etc. If I and my friend had
visited a temple, then I can communicate my thoughts about
that temple to my friend by making use of the logically proper
names.  But suppose another friend of mine did not visit that

─────────────────────

1.  Russell, B. : Logic and Knowledge, ed. by R.C. Marsh
    (Great Brittain: The Macmillan Company, 1964), pp. 323 ff.

temple, then how can I refer to that temple by making use
of the logically proper names?  Similarly if I have to
introduce my brother to my friend and my brother stays in a
town far away from here, how am I to make use of logically
proper names to refer to my brother?

If someone suggests that I can refer to my brother
by making use of some definite descriptions along with the
logically proper names, I would say that I can refer to my
brother only by making use of definite descriptions, I do not
need logically proper names.

'Referring to an object' might mean two things: I
refer to an object whether another person in a communication
situation will be in a position to identify the object or not.
In this sense when I say to someone that "I met a man," I
successfully refer to that particular man by using the phrase
"a man".  Even the phrase "a man," I do not need, I can refer
to that man just by saying "I met him on the way".  In a
communication situation I fail to convey what I wanted to
convey by saying "I met him on the way" unless I had made
a reference to him either by his name or some definite
description of him.  'Referring to an object' might mean
that in a communication situation the hearer will be in the
position to identify the object which I am referring to. If
there is no way that the hearer can identify the object to

which I am referring the whole purpose of communication breaks down.

Logically proper names can do the referring function successfully in the latter sense if the speaker and hearer have the common perceptual field. If the speaker and hearer do not have the same perceptual field, then the speaker is referring to something in the former sense, and the hearer will not be in the position to identify the object referred to. This way of referring with the help of logically proper names will not serve any communication purpose where the speaker and the hearer do not have the common perceptual field.

(B). Ostensive Names:

By 'ostensive names' we do not mean something which is different from logically proper names in one sense, i.e. both can be used only where there is a common perceptual field for both a speaker and a hearer. Suppose, I and my friend have gone to a shop to purchase one pen. We ask for a pen made by a particular company. The shop keeper shows us a pen. And I return it asking for another pen of the same brand. He gives me another one. I and my friend cannot differentiate one pen from the other. But still I can refer to these different  pens by saying "the first pen," and "the

second pen". This will help us only in that context.
Suppose, we go to another shop and come back to the same
shop again. We demand those two pens which the shop keeper
had shown to us. He gives both the pens together. We fail
to make use of the names "the first pen" and "the second
pen". It is a mistake to think that our failure to use
these names are because we did not make sufficient effort
to differentiate between them, and therefore it is a
practical difficulty. The difficulty is logical. If A and
A' are two objects having the same characteristics and if
I refer to only one out of the two by making use of temporal
factor, in the absence of the temporal factor I cannot refer
uniquely to only one object. In that case, if possible, I
must find out another way of uniquely referring to only one
object.

In one sense of the term 'refer' I can refer to the
pen which was shown to me by saying "the first pen" eventhough
no one is in the position to know to which I am referring to,
out of the two pens I have. In another sense of the term
'refer' in a communication situation, I cannot communicate
only about the first pen by making use of the name "the
first pen". If I say purchase the first pen, I will be
saying nothing but purchase one of the two pens given to
us, as I or anyone cannot distinguish one from the other for

they have the same characteristics.

Ostensive names in the sense I have explained can be anything that succeed to refer to only one thing in a communication situation where there is a common perceptual field between the speaker and the hearer. "He," "she," "it," "they," etc. are also ostensive names in this sense. I can point out to a man and say "He is a hard worker", the speaker who looks towards that side can identify the man I am referring to. Other personal pronouns also can be used similarly in a communication situation where there is common perceptual field for both the speaker and the hearer.

(C). Names of Real and Unreal Objects:

Logically proper names and ostensive names can be used for only real objects which are within our past or present perceptual field. But we not only name the objects which are within the past or present perceptual field, we name also the objects which would exist in the future, e.g. parents can name their unborn child. We name many imaginable objects, characters of ficticious novels etc. We also name only conceivable objects, e.g. a perfect triangle ABC. I cannot imagine a perfect triangle for my imagined triangle will have the sides which have breadth, and for the same reason the sum of all angles of my imagined triangle will be less or more than $180^o$.

How we manage to name an unreal object? This we do by imagining certain descriptions. 'Pegasus' is an example of this sort. And when we name a perfect triangle ABC, we name it with the help of the description that it is a figure having three sides A, B and C. We can only conceive of this triangle, but cannot imagine or perceive. Thus, with the help of descriptions, we manage to refer to only one thing perceivable, imaginable or conceivable.

(D). General Names:

We divide a class of students into A, B; we call different teams of players as A, B etc. 'A' and 'B' can be said to be class names or general names. We refer to a group of students or players by using the names A and B. One student or a few will not form a class of students where there are many. Similarly five members cannot form a Cricket team. All the members of a class of students will form the class, and eleven players can form a Cricket team.

3. Identification Function of a Name:

The speaker knows to which object he is referring to eventhough he is not perceiving or able to imagine the object referred to. He must be able to conceive of the object he is referring to. Where there is common perceptual

field, for the speaker and the hearer, the speaker can make use of the logically proper names or ostensive names. But when the speaker refers to an imaginary object or only a conceivable object, he must have to use descriptions in a communication situation.

Only taking speaker's point of view and forgetting the communication situation people have put forth a theory of names claiming that a name refers to an object. A name does not need any sense, or meaning in order to refer to only one object. A genuine name has no sense or meaning; it has only a referrent. So called logically proper names are the only genuine proper names. This is the theory of Russell[2] and early Wittgenstein[3].

The opposite thesis I put forth is this: It is logically impossible to **refer** to a thing without identifying it. To identify an object at least one criterion is needed. To have a criterion for a name is to have a sense. Therefore, we cannot have a name without a sense or meaning.

In a communication situation we canot make use of "this", "that," "he," "she," "it," "they" etc. ostensively

---

2. Op. Cit.

3. Wittgenstein, L. : Tractatus Logico Philosophicus, (Lonton: Routledge & Kegan Paul, 1961), **pp.** 21 ff.

when there is no common perceptual field for the speaker
and the hearer. Common perceptual field should not be taken
to mean only the present; it also includes the past or
future common perceptual field of the speaker and the hearer.
In the absence of common perceptual field also the speaker
can refer to only one object by making use of logically
proper names or any ostensive names keeping some descriptions
of the object in his mind, but this will not serve any
communication purpose, as the hearer will not have any
method to identify the object referred to. Whereas, if
someone refers to an object by describing it, this can be
used in any communication situation irrespective of whether
speaker and hearer had or have a common perceptual field.

We do not make use of descriptions when we have a
common perceptual field, but make use of "this," "that," etc.
or "he," "she," "it" etc. would in fact does not go against
the fact of naming by descriptions. Simply we do not need
descriptions as the hearer is in a position to identify
the object named by perceiving different characteristics. In
a context "I am referring to the man with curl hairs" may
be a sufficient description for identifying him.

Why a hearer fails to identify a man when a speaker
refers to him by saying "I met a man"? The speaker has met
a particular man. The hearer fails to identify the man

refered to for the reason, he has no criterion to identify
that man. If the speaker gives a set of descriptions which
form a unique description of that man, then the hearer can
identify the man.

The difficulty that the hearer faced in identifying
the right person was not just practical. It was theoretical
too. It was practical difficulty in the sense the hearer
did not have any unique description of that man but he could
learn it from the speaker. The difficulty is theoretical:
How can anyone who has no definite description of an object
identify it? In otherwords, can anyone who has no knowledge
of a definite description of an object identify it?

Can anyone name something without knowing anything
about it? Can anyone refer to something without knowing to
which he is referring? Answers to these questions have to
be in the negative. Suppose someone says he can name or
refer uniquely to a thing without knowing it. Then, suppose
I ask him by showing my pen, "Is this the object you have
named?" If he says "Yes," then he knows which object he has
named. If he says "No," then I will ask him on what grounds
he says that this is not the object he has named. In order
to give the grounds he has to give me some criterion to
distinguish the object he has named from others.

Suppose I take in my hand two pens of the same make and of the same brand. And both the pens have the same characteristics except that one is in my right hand and other is in my left hand. One pen is for me and the other is for my friend. I ask my friend which one he would like to have. Suppose he says the pen which is in my right hand. Meanwhile a stranger comes and asks my friend about something. I exchange the pens which I have in my hands, without allowing my friend to notice it. I ask him to have his pen. He demands the pen which is in my right hand now. I reply to him that that is my pen. Which one is his pen? The pen which is in my right hand having such and such characteristics or the pen which I have in the left hand having the same characteristics? One is tempted to say that my friend has failed to identify his pen because he had no knowledge of what I did when he was talking to a stranger. If we say that my friend's pen is in my left hand, then what we are saying is that my friend's pen is a pen which is in my left hand having such and such characteristics. But this was not my friend's pen, his pen is that which is in my right hand having such and such characteristics and there is one which satisfies **the** description of his pen. To say that my friend's pen is not the one which is in my right hand now, but the one which is in the left hand is to admit that we have some

ways to distinguish them besides the fact that the
characteristics that one is in the right hand and the other
in the left hand.  Then we are going against our supposition
that they do not have any other characteristic  different
from the one's being  in my right hand and the other's
being in my left hand.  Suppose further that I give both
the pens to him and ask him to pick up his own.  He fails
to identify his own pen eventhough he was the person who
had referred to one of the pens as his. Why?

Consider another imaginary example.  Suppose I am
asked to form a list of five objects in an ascending order
of the weight they have, and they must be named as A, B, C,
D and E in the same order.  I weigh the objects and find
that two objects have the same weight.  I have a practical
problem.  But I have a theoretical problem too.  Someone
may suggest that I. should use a sophisticated balance.  But
this is not going to solve the theoretical problem, for we
can imagine two objects having the same weight howsoever
sophisticated balance we use.  Two molecules of the same
element will have the same weight.  I put the first and the
second objects in the ascending order and name them A, and
B.  Out of the two objects which have the same weight I do
not know which is to be put in the third position and to be
called C.  Suppose I complain that I cannot do so as suggested.

Further he suggests me to put one of the two in the third position and the other in the forth position and call them respectively C and D. I did so. My friend comes and he keeps the object kept in the third position in the forth and the object in the forth he keeps in the third. Which object is C and which is D? How can the same object be C and D both at different times? How can the same name refer to two objects? Out of those two objects which one should be called C and which one should be called D?

The practical as well as the theoretical difficulty one is facing to identify the object one names is because we do not have a criterion to uniquely identify an object. My friend failed to pick out his pen when I gave both the pens to him because then he had no criterion to distinguish his pen from mine as both the pens had the same characteristics. We could not decide which object should be kept in the third position and should be named C, for we had no criterion to distinguish the third from the forth in the order we are asked to keep them. One fails to refer to only one object because he has no definite description of that object, which distinguishes the object from others. To refer to only one object we need some criterion/criteria to identify it.

(A). Criteria and Identification:

When we name an object ostensively or when we make use of logically proper names, we do not need criteria which are explicitly stated. They are inherent in such cases. When I point to a gentleman and state that he is Mr. Jain, that is enough for the hearer to identify him. I need not have to give a list of criteria to identify Mr. Jain, for the hearer is in the position to find out criteria for himself by observing Mr. Jain. Similarly when we use "this," "that" or "he," "she," "it" in a context without referring to their names, we need not have to give a set of criteria to identify the objects, because these words are used in a context where we do not need criteria explicitly stated. Therefore, the fact that we do not state or we are not aware of criteria of certain names does not go against the thesis that we need criteria for names to identify their referents.

(B). Criterion for a Name:

A criterion for a name can be only a unique description of the object to which the name refers to. A unique description of an object helps us to identify that object among many objects. It also helps us to refer to only one object. A unique description of an object need not be necessarily one or two, it can be many. But where we fail

in principle to give a unique description of an object, and then we also fail to refer to only to that object, and consequently we fail to name that object. However, if we are able to distinguish an object from other objects, that implies that we can provide a criterion for its name howsoever it may be difficult. Definite descriptions of an object can be used as criteria for a name of that object.

## 4. Name, With Versus Without Sense:

To have a criterion for a name is to have some sense. When I give a criterion for a geometrical point say, A, by defining it to be a point at the intersection of the straight lines BC and DE; I am giving the sense of the name 'A'. The meaning of name 'A' is 'a point at the intersection of the straight lines BC and DE'. If I deny that A is a point at the intersection of the straight lines BC and DE, then it will be self-contradictory, for what I am saying in the first part of the sentence is denied in the second part of the sentence. Only an expression which has some meaning can be self-contradicted in a sentence. This proves that 'A' is a name with some sense.

A criterion when it is denied of the name for which it is a criterion, it need not give rise to self-contradiction always. For example, a criterion for the name 'Jawahar' is

'one who was first Prime Minister of India', and another criterion for the name is the 'one who was the only son of Moti Lal'. If I say "Jawahar is not the first Prime Minister of India", I am not making a self-contradictory statement. It is a meaningful sentence. This is possible because the meaning or sense of the name 'Jawahar' is not constituted by only one criterion; it is constituted by many criteria. If I deny a criterion of a name where it has many, the name will not cease to be a name, for it has other criteria also. If a name has only one criterion, a defining criterion, if that is denied of the same name, then there will be no criterion left, and for the same reason it will cease to be a name, and the sentence containing it ceases to be meaningful.

## 5. Names, Symptoms and Criteria:

Is it not the case that we do not have criteria at all for many names? I have been introduced to a number of persons, and in many cases except their names I do not know anything about them. This is likely to lead us to the thesis that some names in fact do not have any criteria. Then how do I distinguish one name from another? Or if two persons together come to me and if I know only their names, but not any criteria of them then how am I going to identify them with their names? Here is the role of the symptoms. Imagine

that one of my friends have written a letter to me states
that a tall, slim and white complexion man by name Parkash,
will be meeting me at 11 a.m. on a particular date.  At
11 a.m. exactly on that date a man having all the above
symptoms comes to me, and I recognize him to be Parkash.
True, this is not a criterion of Mr. Parkash.  There might
be uncountable number of persons with these characteristics.
But from his appearance I will be making a hypothesis of the
existence of the criterion of the name 'Parkash' i.e. ' a man,
tall, slim and whitish, to whom my friend had referred to
in his letter, and who was expected to meet me at 11 a.m.
on a particular date', and recognize him to be Parkash.  But
there is every possibility that Mr. Parkash could not come
to see me for some genuine reasons and his brother who looks
similar to Mr. Parkash has come on the request of Mr.Parkash.

In principle there is no harm in a criterion being
a symptom of another name, and vice versa.  Imagine that
Ravi and Shashi always go for an evening walk together. I
see Ravi, and on the basis of which I can say Shashi must
be present somewhere there.  Or I see someone who walks
like Shashi, I would say then Shashi and Ravi must be coming.
A symptom of a name has to be symptom of many names, otherwise
it will be a criterion of one or the other name. Therefore,
any description in fact will be symptom of many names, or

else it will be definite description of something, hence becoming a criterion for the name of that object.

A criterion for a name is a definite description of the object named. The object will have many descriptions which are not descriptions of only that object. There are certain descriptions which are true of that object at different times. For example, walking style, accent of speach, of a man might be the same for years. Eventhough these descriptions of a man is not unique of that man only, they are found true of that man repeatedly. On the basis of such descriptions we make a hypothesis of the existence of a criterion, i.e. a unique description of that object, and recognize it to be having some particular name.

We have already seen the nature of criteria in the context of a concept. Criteria in the context of a name is not different from that of criteria of a concept so far as its logic is concerned. To put the criteria of a name symbolically: If X is a criterion of a name 'Y', then if the criterion X is satisfied, then we can replace Y in its place without bringing any difference to the truth value of the statement in which the criterion occurs. 'Jawahar' is the name of our late Prime Minister. Two criteria of name 'Jawahar' are: 'one who is the son of Moti Lal', and 'one who is the first Prime Minister of India'. In any statement

wherever one of these two criteria occur, one can safely replace it by the name 'Jawahr' without bringing any change in the truth value of the statement. Here it is presupposed that "Moti Lal" is the name of only one person, eventhough there can be many persons who have this name. Though the same word is used to call different persons, they are not one and the same names for the reason that the criteria i.e. the definite descriptions associated with these names are different. These definite descriptions do not describe only one object. It is a linguistic accident that two or more persons are called by the name. It can be avoided by making use of different words for these different names. The logic of criteria is such that if the statements "One who is the first Prime Minister of India is fond of children" and "One who is the son of Moti Lal is fond of children" are true, then the statement "Jawahar is fond of children" must be true, and if they are false, then the third sentence also must be false.

A name can have two or more criteria as it can have many definite descriptions. Obviously all the descriptions of the object named cannot be the criteria of that name, for all the descriptions of the object named are not the definite descriptions of it. Therefore, the number of the criteria of a name has to be less than that of the number of

the true or false statements that can be made by making use of that name.

A criterion of a name cannot be criterion of another name, unlike concepts. A criterion of a name helps us to identify the object. Only definite descriptions can help us to correctly identify the object named. If a criterion of a name can be criterion of another name then it will not remain the criterion of any name, for it will not help us to identify only one object referred to by those names. And, further, it is impossible for a definite description to be a definite description of two objects. If it is a description of two objects then it is not a definite description, and it will be just a description of those two objects.

It might be the case that a name has one and only one criterion which is a defining criterion of that name. For example, the name 'equator line' seems to me to have only one criterion i.e. 'a line which is drawn in imagination in the middle of the earth'. If I deny the criterion, then the sentence "Equator line is not drawn in imagination in the middle of the Earth" would be self-contradiction. It becomes self-contradictory because the meaning of the name is due to the defining criterion and if we deny in the predicate the very meaning of the name, then it becomes

meaningless. A name might have more than one criteria. In
that case if I deny a criterion, then the statement will not
be self-contradictory, but must always be false. For example,
if I say "Jawahr is not the son of Moti Lal" is meaningful
because the name 'Jawahar' has many other criteria, amongst
which 'one who is the first Prime Minister of India' is also
one. But this sentence is false as we have denied a criterion
of the name. Therefore, if a criterion of a name is denied
of the name where there are more than one criteria for the
name, then it will be a false statement, and hence will also
be meaningful. From this we can say that any statement
which is denied of a name, if it is true, then it is not a
criterion of that name. For example, "Jawahar is not the son
of Gandhi" is a true statement, therefore, the description
'one who is the son of Gandhi' is not a criterion of the
name 'Jawahr'. A criterion when it is denied of the name,
it gives rise to false statement but not vice versa. "Birendra
is the first President of Nepal" is a false statement as Nepal
is a monarchy. And if I deny the definite description 'One
who is the first President of Nepal' to the name 'Birendra',
we also get a false statement i.e. "Birendra is not the
first President of Nepal", as Nepal is a monarchy. It is
a mistake from this if we conclude that 'one who is the first
President of Nepal' is a criterion for the name 'Birendra'

as its denial gives rise to a false statement.  It will be
a mistake if we think that denial of a criterion of a name
also must be a criterion of that name.

Unlike  concepts, it appears that whatever is true
of names is true of their criteria also.  We can replace the
criterion of a name, or one criterion by another, in the
statement in which that name occurs without making any
difference to the truth value of that statement.  If the
statement "Jawahar is fond of children" is true, it cannot be
the case that the statement "One who is the son of Moti Lal
is fond of children" is false.  Similarly it cannot be the
case if the statement "One who is the son of Moti Lal is
fond of children" is true and the statement "One who is the
first Prime Minister of India is fond of children" is false.

Our impression  is at least partially wrong. For
example, the name 'Jawahr' has two criteria namely, 'one who
is the first Prime Minister of India' and 'one who is the
son of Moti Lal'. The statement "Jawahr is not the first
Prime Minister of India" is false.  If we replace the name
'Jawahr' in this sentence by a criterion 'one who is the
first Prime Minister of India' we get the sentence "One who
is the first Prime Minister of India is not the first Prime
Minister of India" which is a meaningless sentence as it is
a self-contradictory statement.  And the sentence "One who

is the first Prime Minister of India is not the son of
Moti Lal" is false, and if we replace the criterion 'one
who is the first Prime Minister of India' by another
criterion of the same name namely, 'one who is the son of
Moti Lal' then we get "One who is the son of Moti Lal is
not the one who is the son of Moti Lal" which is a meaningless
sentence as it is self-contradictory and therefore its
being true or false is ruled out. Similarly the statement
"One who is the son of Moti Lal is not the first Prime
Minister of India" is false, whereas, the statement "One
who is the first Prime Minister of India is not the first
Prime Minister of India" is meaningless as it is a self-
contradictory statement.

To sum up the discussion: We can replace a name in
the place of a criterion, and the truth value of the statement
will remain the same. But if we replace a name by a criterion
in a statement the truth value of the statement not necessarily
will remain the same. And further if we replace a criterion
of a name by another criterion of the same name in which
the first criterion occurs, the truth value of the statement
not necessarily remains the same. If a criterion of a name
is replaced by another criterion of that name, then if the
statement in which the first criterion occurs is true, then
the second statement also must be true, but if the first

statement is false, it is not necessary that the second statement also is false, for we have seen that it can be meaningless also.

## 6. Can We Eliminate Proper Names?:

Can we perform all linguistic activities without proper names which we perform with the help of proper names? Can we, for all logical purposes, do away with proper names? Here is a view put forth by Quine according to which we can do away with proper names:

> "Now what of 'Pegasus'? This being a word rather than a descriptive phrase, Russell's argument does not immediately apply to it. However, it can easily be made to apply. We have only to rephrase 'Pegasus' as a description, in any way that seems adequately to single out our idea; say, 'the winged horse that was captured by Bellerophon'. Substituting such a phrase for 'Pegasus,' we can then proceed to analyze the statement 'Pegasus is,' or 'Pegasus is not,' precisely on the analogy of Russell's analysis of 'The author of Waverley is' and 'The author of Waverley is not'.4

Against the position which maintains that we can do away with proper names, and we can use definite descriptions in their place for all logical purposes, I would like to

---

4.  Quine, W.V. :From a Logical Point of View, (Cambridge: Harvard University Press, 1961), p.7.

argue that the definite descriptions fail to perform all
linguistic activities which a name can perform; therefore
we cannot do away with proper names. This I will show by
showing that the number of meaningful sentences that one can
have with the help of a definite description(s) is always
less than the number of meaningful sentences one can have
with the help of a name. I shall argue, further that at
least those meaningful sentences which we can have with the
help of names but which cannot be had by making use of a
definite description will be able to serve any logical
purpose.

(A). Names Versus Definite Descriptions:

The main functions of a proper name is to refer to
only one object and identification of it. A proper name can
do these functions with the help of its own criteria i.e.
the definite descriptions of the object to which a name
refers to. The function of referring to only one object and
its identification can be done by the definite descriptions
themselves. This makes one think that we can do away with
proper names, and we can do all the linguistic activities
with the help of definite descriptions.

Consider an example, 'Jawahr' is a name and two
definite descriptions of the referent are 'one who is the

first Prime Minister of India' and 'one who is the son of Moti Lal'. Let all those meaningful sentences which we can make by the use of name 'Jawahar' be n. n includes "Jawahar is one who is the first Prime Minister of India," "Jawahar is not one who is the first Prime Minister of India" and "Jawahar is one who is the son of Moti Lal," "Jawahar is not one who is the son of Moti Lal". Suppose I use the definite description 'one who is the first Prime Minister of India' instead of the name 'Jawahar', then the sentence "Jawahar is not one who is the first Prime Minister of India" turns out to be a meaningless sentence as what is asserted in the first part of the sentence will be denied in the second part of the sentence. Therefore, the number of meaningful sentences that we can get if we make use of the definite description 'one who is the first Prime Minister of India' instead of the name 'Jawahar' is n-1. Similarly when we replace the name 'Jawahar' by the definite description 'one who is the son of Moti Lal' the meaningful sentence "Jawahar is not the one who is the son of Moti Lal" will turn out to be meaningless as it will be a self-contradictory statement. The maximum number of meaningful sentences that we can have by making use of this definite description instead of the name 'Jawahar' will also be n-1. Thus if we replace a name by any definite description of the object to which the

name refers to, then we will have less number of meaningful sentences.

It may be argued that this drawback can be overcome, where an object referred to by a name has more than one definite descriptions. Consider the above example once again. The sentence "One who is the first Prime Minister of India is not one who is the first Prime Minister of India" can be made meaningful by using another definite description. If we replace the first or the second part of the above meaningless sentence by 'one who is the son of Moti Lal' we can get a meaningful sentence. Thus "One who is the son of Moti Lal is not one who is the first Prime Minister of India" or "One who is the first Prime Minister of India is not one who is the son of Moti Lal" are meaningful. Similarly we can make the meaningless sentence "One who is the son of Moti Lal is not one who is the son of Moti Lal" meaningful by replacing the first or the second part of the sentence by another definite description of the same object. This does not help us much, because the maximum number of $\underline{n}$ meaningful sentences did not include these meaningful sentences. We can have these meaningful sentences even when we make use of the name 'Jawahar'.

A doubt may arise that it is true with proper names as well that what is said in the first part, if it is denied

in the second part of the sentence, then it will be
meaningless. In the sentence "One who is the first Prime
Minister of India is not one who is the first Prime Minister
of India," if I replace 'Jawahar' in both the places where
'one who is the first Prime Minister of India' occurs, then
the sentence will be "Jawahar is not Jawahar" which is a
self-contradictory and meaningless. One may say that there
is no point in replacing a criterion by its name. Eventhough
"Jawahar is not Jawahar" is meaningless, the fact cannot
be neglected that the number of meaningful sentences that
one can have with the help of a name is always more than
the number of meaningful sentences one can have with the
help of any one of its criteria.

(B). Name Versus Criteria in Sentence-Meaning:

Instead of names, if we use definite descriptions,
then there will be some change in the meaning of the sentence.
For example, if the name 'Parkash' has a criterion 'one who
has secured first rank in his M.A. from Banaras Hindu
University in 1975' and if I make a meaningful sentence
"Parkash is very dull" by making use of the name 'Parkash',
then if I replace the name by the criterion the sentence
will be "One who has secured first rank in his M.A. from
Banaras Hindu University in 1975 is very dull"  which has

a different meaning. The sentence "Parkash is very dull" is about only the man Parkash, it does not say anything about Banaras Hindu University. Whereas, the statement "One who has secured first rank in his M.A. from Banaras Hindu University in 1975 is very dull" will be a statement about both Parkash and Banaras Hindu University. It not only states Parkash is dull, it also states that the standard of Banaras Hindu University is very low such that a very dull student can secure the first rank from this University. Thus we have conveyed something other or more than what we wanted to convey.

It may also convey something less than what we wanted to convey if we use a definite description instead of a name. For example, the name 'Gandhi' has a criterion 'the one whom Nathuram Ghodse has murdered', and if I replace the criterion for the name 'Gandhi' in the sentence "Gandhi was inspired by the story of Harishchandra", we get "The one whom Nathuram Ghodse has murdered was inspired by the story of Harishchandra" which conveys something less than what we wanted to convey.

The difference in meaning of a sentence in which we replace a criterion for a name is due to two factors: (1). A criterion itself will have some meaning because of which it can identify and refer to an object. (2). The meaning of a name is constituted by all the criteria of that name. A

criterion and a name have difference in their meanings except in one case where a name has only one criterion. If a name has only one criterion then the name and criterion are interchangeable, and they will not bring any change in the meaning or truth value of the sentences in which they occur, as the name and the criterion have the same meaning.

It may be argued that in order to retain the same meaning for a sentence when we replace a name by its criteria, we must state all the criteria of the name. Eventhough it is cumbersome and unmanageable, this should not bring any change in the meaning of a sentence as the meaning of a name is constituted of the criteria it has. But it has another drawback. If we do so, then the number of meaningful sentences which we can have by making use of all the criteria will be reduced to a great extent. If the number of meaningful sentences one can have with a name are $\underline{n}$, and if we replace the name by its criteria, then the number of meaningful sentences we can have with be $\underline{n}$ $\underline{minus}$ the number of criteria the name has. For example, if 'Jawahar' has only two criteria i.e. 'one who is the first Prime Minister of India' and 'one who is the son of Moti Lal' then if we replace 'Jawahar' in the statements "Jawahar is not one who is the first Prime Minister of India" and "Jawahar is not one who is the son of Moti Lal" we get two meaningless sentences

namely "One who is the first Prime Minister of India and one who is the son of Moti Lal is not one who is the first Prime Minister of India" and "One who is the first Prime Minister of India and one who is the son of Moti Lal is not one who is the son of Moti Lal", for these sentences are self-contradictories.

Moreover, many definite descriptions themselves involve some names. I believe when Quine has suggested to use 'the winged horse that was captured by Bellerophon' instead of the name 'Pegasus', he has not succeeded to remove all names. I believe 'Bellerophon' is a name. It might be the case that Quine's purpose was not to do away with all names.

For the above reasons discussed, it is clear that it is not worth attempting to do away with names.

7. Referring and Predicative Uses of a Word:

When we want to refer to something we need some criterion to identify the object named. In other words, we need definite descriptions to identify the object named. There can be many definite descriptions of an object, but a single criterion will suffice. When we use a concept referentially, we use the concept referring to all objects belonging to that concept. A definite description which

includes all objects might consist of many phrases so that we neither include any object which does not belong to that concept nor we exclude any object which belongs to it. One way to find such a definite description is to list all the criteria of that concept which will include all the objects belonging to that concept and at the same time exclude all the objects which do not belong to that concept. For example, in the sentence "Red is a colour" 'red' does not refer to only deep red, but also to purple, orange etc., but at the same time it does not refer to any shade of yellow or blue.

When we use a concept predicatively, we do not need a definite description to predicate something. We need one or the other criterion for the concept to include the object described under it. We need a criterion which has generality. There can be many criteria for a concept, but when we use it as a predicate, we need only one criterion to be satisfied. Sometimes we need only some symptoms to be satisfied on the basis of which we hypothesise the existence of a criterion of that concept. When we describe an object we describe it as one amongst many. When we describe an object, we do not identify the object, we do the opposite of it. When we name an object, we need a criterion which is a unique description of that object, but when we describe, we need a criterion which is not necessarily a unique description of that object,

but which may be a general one. For example, in "Mr. X is
a good man," Mr. X will be satisfying at least one criterion
of the concept 'good man', when Mr. X does at least some
activities that any good man does.

When we use an expression which expresses a concept
as a subject of a subject-predicate sentence, we are using
the word referentially, but when we use it as a predicate,
we use it predicatively.

## 8. Name-Meaning:

Broadly speaking, in the history of philosophy
there has been two views, one of which maintains that
names have meaning and the other maintains that they do
not. But both the views agree that names must refer to
something. I positively avoid going into the historical
developments of these two views for the reason that it is
more important to know what we can say on this controversy
in the light of the earlier discussions.

There are many psychological associations that one
can have with certain names for so many reasons. One might
like or hate the very word which is associated with a name.
One might expect certain sort of behaviour in certain cases
of the object named just because the name suggests something.
For example, if somebody's name is Harishchandra, we may

expect him to be truthful. Because of some or the other psychological, historical, religious, sociological significance, a word may have some suggestive meaning.

The suggestive meaning of a name must be distinguished from what one may prefer to call its cognitive meaning. Strictly speaking the suggestive meaning of a name does not help us in many cases to identify or refer to the object named. Therefore it can be said that only suggestive meaning of a name cannot do the functions of a name. The cognitive meaning of a name is constituted by its criteria.[5] The criteria are the definite descriptions of the object which is named. Meaning of a name can be said thus to be constituted of its suggestive and cognitive meanings.

It is not unimportant to devote some lines to a third view for which the question of meaningfulness or meaninglessness of names cannot be raised. Austin writes:

> "It may justly urged that, properly speaking,
> what alone has meaning is a <u>sentence</u>. Of course,
> we can speak quite properly of, for example,
> 'looking up the meaning of a word' in a dictionary.
> Nevertheless, it appears that the sense in which
> a word or a phrase 'has a meaning' is derivative
> from the sense in which a sentence 'has a meaning':

---

5. This point has been persued to some extent by John R. Seasle in his article: 'Proper Names,' in the book <u>Philosophy and Ordinary Language</u>, ed. by Charles E. Caton, (Urbana: University of Illinois Press, 1963),p.159 f.

> to say a word or a phrase 'has a meaning' is
> to say that there are sentences in which it
> occurs which 'have meaning': and to know the
> meaning which the word or phrase has, is to
> know the meanings of sentences in which it
> occurs."5

One can extend an argument in support of such a view claiming that only about such things which have the disposition to be meaningful or meaningless the question of its being meaningful or meaningless can be raised. If you say names have meaning, then you must admit the possibility of there being names which have no meaning, whereas, the one who says names have no meaning must have to admit the possibility of there being names which have meaning, otherwise the question is inappropriate. If all names have meaning, or no names have meaning, then in both the cases the question whether names have meaning is trivial.

I reject the view that a question about the meaning of a name cannot be asked. The question whether a name is meaningful or not cannot be asked under three situations: (1). It is quite obvious that names have meaning, therefore the question is trivial. (2). It is quite obvious that names do not have meaning, therefore the question is trivial. (3).

---

5.  Austin, J.L.: 'The Meaning of a Word,' in Philosophy and Ordinary Language, ed. by C.E.Caton, (Urbana: University of Illinois Press, 1963), p.2.

This question cannot be asked meaningfully at all as it commits a category mistake. The controversy whether names have meaning or not shows that it is not so obvious that names have meaning, nor that they do not. The third case that we cannot ask the question of names being meaningful or not, for we do ask this question meaningfully in the context of names. Even if we admit that we can ask the question about meaningfulness or meaninglessness in the context of a sentence, it does not rule out the possibility of asking the question meaningfully in the case of words, for the concept 'meaning' can have different criteria by making use of which one can ask the questions meaningfully at the level of words as well as at the level of sentences.

We are left with only three alternatives: (1). names have only suggestive meaning, (2). names have only cognitive meaning, (3). names have both suggestive and cognitive meaning. I would like to maintain the third possibility. I agree fully with the view that names have suggestive meaning, but they are not sufficient to perform the functions of a name; therefore we need some criterion/criteria which constitute the cognitive meaning of a name. To think that if a name has many criteria then it must have many meaning is misleading. A name will have only one meaning, whether it has one or many criteria. We can legitimately talk of

richness in the meaning of a name, but not of different meanings.

9. Synonymous Names:

We call any two linguistic expressions synonymous if they satisfy two conditions: If we replace one expression for the other in a sentence then: (1). there will not be any change in the truth value of the sentence, (2). there will not be any change in the meaning of the sentence. In this sense, two expressions which express one concept, one name or two sentences which have the same meaning can be said to be synonymous. 'Occulist' and 'eye doctor', are synonymous as they express only one concept. "Mr. X is an occulist" and "Mr. X is an eye doctor" are synonymous as they express the same meaning. The same kind of example we can find where we have two names of an object. A name and a definite description cannot be synonymous, unless a definite description is the only criterion of a name. A word which expresses a name is synonymous with another word which expresses the same name, for they will have the same meaning because of which their interchange in a sentence is not going to bring any change in the truth value of a sentence in which the names occur.

richer and richer as we go on adding new criteria to it.
Richness in meaning is not only due to criteria; it can be
due to the addition of suggestive and emotive meanings. The
meaning of a name is constituted of suggestive and cognitive
meanings of that name. Suggestive meaning can grow if people
start giving much importance to that name for its sociological,
political, historical, religious significance. Meaning of
the name 'Buddha' is very rich in comparison with my own name.

11. Ambiguous Names:

    There are two senses in which we can talk of ambiguity
of a name: We know a name, but we may fail in identifying
the object because of some practical difficulty in using a
criterion. For example, we know the name of a murderer, but
may fail to identify him even though we have some criterion.
There are many persons or things which are named by the
same word. For example, my nephew is called by the name
'Prakash' and one of my friends is called by the same name.
If my brother makes a compliment "Prakash is intelligent",
then I fail to identify the person refered to in some context,
for I know two persons who are named by this name if the
predicate concept 'intelligent' can be predicated of both
the persons.

In certain other context, it may not be very difficult to identify the object even if we name different things or persons by making use of the same word. Suppose, my dog is also named 'Prakash'; then if my brother says "Prakash barks at birds", then I can identify very easily the object refered to, as 'bark' cannot be predicated of a human being in a literal sense, and it is predicated of a dog.

We manage to use the same word to name different persons. Even if sometimes we have to face some ambiguous sentences, we ask for some clarification. A single definite description of the object will suffice our purpose. Even some symptoms sometimes serve us to identify the object when there is ambiguity problem.

## 12. Change of Names:

Names of persons, places, things etc. can be changed in one sense. In the constitutions of some governments there is a provision to change one's name. It does not make any sense to say that we can change a name of an object which has no name. When we speak of change of names, we must be in the position to point out which name has been changed into what. That is to say we must be able to say which is the new name of that object. In otherwords we must rename the object if we want to change its name. In this sense

change of the name 'Family Planning' into 'Family Welfare'
is a change of name. What we have changed here is the
words and the associated suggestive or emotive meanings. A
person who hates the word 'planning' may not hate the word
'welfare'. It is thought in this case that changed name is
more appealing to the people.

In another sense, the change of names is impossible.
This is in the sense of the cognitive meaning of names. The
earlier name or the changed name will have the same set of
criteria, and therefore the old and new names will have the
same cognitive meaning. If a man has two names 'X' and 'Y',
then also we cannot talk of change of name 'X' into 'Y' or
vice versa; even if I drop 'X', it is not a case of change
of name as 'Y' was already one of its names. Change of
name is impossible in the sense that the definite descriptions
of the object remain the same, and the definite descriptions
constitute the cognitive meaning of a name. It is possible
that certain criteria are newly added to a name, but this
change in the criteria of a name does not bring the change
in the name; it only makes the name more rich in meaning.

Which meaning of a name is important philosophicaly?
Cognitive or suggestive and emotive? Suppose 'Neeraja' is a
name of a girl. It has the cognitive meaning 'the daughter
of so-and-so'. Its etymological meaning is 'the one which

is born in water'. It has the suggestive meaning that 'one which is delicate', and 'one which is sacred'. It has the emotive meaning 'it is very beautiful and pleasing'. Suppose we have to find out whether the statement "Neeraja is intelligent" is true or false. Do we check up whether one who is born in water is intelligent? Do we check up one which is delicate and sacred is intelligent? Do we check up who is beautiful and pleasing is intelligent? These things will not help us to find out the referent. Emotive meaning without the help of cognitive meaning cannot perform the function of a name. But we can very well have a name without any suggestive and emotive meaning. Logically proper names used in a context are good examples of this sort. They are names because in a context they successfully perform the function of a name eventhough they do not have suggestive and emotive meanings.

To sum up: we can have names without suggestive and emotive meanings, but we cannot have names without cognitive meaning. When we change a word which expresses a name and use some other word, there can be change in the suggestive and emotive meaning of the word which expresses the name. Change of a name is impossible in the primary sense, for the cognitive meaning and criteria remain the same.

# CHAPTER V

## SENTENCES

We have been talking about name-meaning, concept-
meaning, etc. in the earlier chapters. But normally we do
not utter isolated names or phrases, or use isolated
concepts. We utter whole sentences. Every sentence must
be composed of either names or concepts or both; but not
every string of names and concepts is a sentence. Name-
meaning, concept-meaning do not guarantee sentence-meaning.
The meaning of a sentence has something to do with the way
names and concepts, as the case may be, are arranged in a
string.

## 1. Grammar:

All that we call words are not either names or
concepts. Some of them are just grammatical rule indicators.
For example 'of,' '...'s,' 'from,' 'to,' 'by,' '?,' '!,' '.'
etc., and one can list many more. These words do not do
the business of referring and therefore do not help us in
identifying objects, as the names do, nor they can be
appropriately or inappropriately applicable to names which
stand for objects. We can therefore describe anything by
their means; therefore, they are neither names nor concepts.
They do not have their independent meaning for the reason

that they are neither names nor concepts.  Any grammatical
mistake can be corrected without adding, or removing the
names and concepts in the sentence concerned.  Grammatical
correction need not  always consist in putting appropriate
grammatical rule indicators at appropriate places; it can
also consist in ordering names and concepts in name-concept
sentences.  For example, "Eats Rama", can grammatically
operated and yield  "Rama eats", which is a meaningful
sentence.  Grammatical correction is pointless in the case
of a meaningful sentence.  Grammatical correction can be
made only in cases where a sentence does not fulfill the
conditions of grammatical rules, and by adding appropriate
grammatical indicators in the appropriate places, the
sentence can be made meaningful; or if a sentence is
grammatically correct, and then if it is still meaningless
and by readjusting the names and concepts it can be made
meaningful, it can be so made.  The fundamental assumption
is that for communication purposes no man intentionally utters
a meaningless sentence.

In the context of words (which include names, concepts
and grammatical rule indicators) it does not make any sense
to talk of grammar.  No word or phrase can be grammatically
correct or incorrect.  To say this is to say that grammar
has nothing to do with words or phrases as such, and its

importance is only in the context of sentences, meaningful or meaningless.

The sentences "Rama ate a banana," "A banana was eaten by Rama," "He who ate a banana is Rama", have the same meaning. There are only two names in all these three sentences, they are 'Rama,' 'a banana', and there is only one concept 'eat'. And all the difference between these sentences is only grammatical. If we add a name or concept to these sentences or if we replace the name or concept or both by some other names or concepts, then the meaning of the sentence will change. For example if I replace Rama by Krishna, then the sentences would be "Krishna ate a banana," "A banana was eaten by Krishna" and "He who ate a banana is Krishna"; they have entirely different meaning. Similarly if we replace the concept 'eat' by the concept 'purchase' the meaning of the sentences will change; "Rama purchased a banana," "A banana was purchased by Rama" and "He who purchased a banana is Rama". If the words "is," "by," are not just grammatical rule indicators, then their addition in the second and third sentences respectively should have brought some change in the meaning of the sentences.

That certain words are just grammatical rule indicators is not so obvious. What about these two sentences? (1). "Geeta is beautiful." (2). "Is Geeta beautiful?" There is

difference in the meaning of these sentences. The first
sentence gives some information about Geeta, and the second
demands some information about Geeta. If '.' and '?' are
just grammatical rule indicators then there is no possibility
of their meaning being different, as we have just seen. It
is likely that we will be led to the thesis that the
difference in the meaning of these sentences is because of
'.' and '?', as these two sentences have the same words
appart from these two so called grammatical rule indicators
and the ordering of the words. Let us rearrange the
sentences as (1). "Geeta is beautiful?" (2). "Is Geeta
beautiful." The first and second sentences have the same
meaning corresponding to the first and second sentences of
our earlier set. But our second set makes us feel uneasy
because it does not follow the rule of grammar. The meaning
difference is just because of the speaker wanted to
communicate two different meanings in these two different
sentences, which are put in two different grammatical modes.

It is not sufficient if a sentence is grammatically
correct for its meaningfulness. All meaningful sentences
must be grammatically correct. Being grammatically correct
is only a necessary condition of a sentence being meaningful.
The sentences "Jawahar is square root of 4", "Redness is
a triangle," are grammatically correct ( at least according

to the old grammar); still these sentences are meaningless.
The first sentence has the name-concept sentence form, and
the second has the concept-concept sentence form.

## 2. Name-Name Sentence-Meaning:

Name-name sentences are usually called identity
sentences. In an identity sentence there has to be at least
two names. But, is any identity sentence meaningful? Can
there be any identity sentence which consists of concepts?
Any meaningful sentence involving a concept must be a
description, where the concept is predicated of some subject.
Then what is the difference between an identity sentence
and a description?

Consider two identity propositions (1). "Indira is
India and India is Indira" (2). "Jawahar Lal is Lal Bahadur".
The first is a meaningless sentence and the second is
meaningful, but false. What makes the second sentence
meaningful and what forbids the first sentence from being
meaningful? The first sentence claims that at least one
symptom, or criterion of Indira is symptom or criterion of
India. But this is not so. Because one criterion of the
name is 'one who is the daughter of Jawahar', the another
criterion of it is 'one who was the third Prime Minister of
India'. Neither the concept 'daughter' is predicable of the

name India, nor is the concept 'Prime Minister'. One of the
criteria of the name India is 'a country which is the second
most populus in the world in 1979,' or 'a country where
Sankara was born'. Neither the concept 'most populus' is
predicable of name 'Indira' nor is the concept 'country'.
Hence the sentence "Indira is India and India is Indira"
(literally) meaningless.

The sentence "Jawahar Lal is Lal Bahadur" contains
two names 'Jawahar Lal' which has as its criterion 'one who
is the first Prime Minister of India', 'one who is the son
of Motilal' etc., and 'Lal Bahadur' which has the criterion
'one who is the second Prime Minister of India' or 'one
who is the husband of Lalita' etc. The concept 'Prime
Minister' is predicable of both the names meaningfully;
therefore this identity proposition is meaningful eventhough
it is false, for the reason that the criteria of the former
are not those of the latter, and vice versa; they do not
have any criterion in common.

## 3. Name-Concept Sentence-Meaning:

First of all let us discuss why some name-concept
sentences are false, but nevertheless meaningful, and some
name-concept sentences are meaningless and hence have no
truth values. The statement "Jawahar was black" is false

and hence it must be meaningful also. And the sentence "Jawahar was the square root of 4" is meaningless and hence its truth or falsity is out of the question. What makes the first sentence meaningful and the second sentence meaningless?

The one possible answer is that it is fact that Jawahar was white-complexioned; therefore, the first sentence is false, and hence it has to be meaningful. The second sentence is meaningless for two reasons: (1). We cannot talk of mathematical truth in temporal order, e.g. we cannot say "2 was square root of 4". (2). A man can never be a square root of a number, only a number can be square root of another number. The mistake committed here is that a name of a person is considered to be a number which is a concept; hence the category mistake of taking a name to be a concept.

This explanation may not satisfy all. The above explanation tried to show that in the first case that a sentence is meaningful because it is false and in the second case the sentence is meaningless because it commits a category mistake. The first sentence exemplifies a criterion of meaningfulness and the second that of meaninglessness. The sentences which are not true also have to be meaningful.

The theory which I propose to discuss is this: The criterion of name 'Jawahar' is 'one who is the son of Moti Lal'.

There are certain concepts that occur in the criterion of
a name which is a definite description. Only those simple
sentences, of the form name-concept will be meaningful where
at least one symptom or criterion of the concept which occurs
in the definite description, must be either a symptom or
criterion of the concept which is used to describe the name.
To put it symbolically: Suppose X is a name and its
criterion is C, and the concept that occurs in the criterion
of the name is P. If it has the symptoms A, B, C, D, and
the criteria U, V, W, then only those concepts can be
predicated appropriately or inappropriately of the name X,
i.e. meaningfully, which have at least one symptom or
criterion from among A, B, C, and D or U, V, W respectively,
as their symptom or criterion. An example will make it clear.
Suppose Jawahar is a name and its only criterion is 'one who
is the son of Moti Lal' and the concept 'son' which occurs
in the criterion of name 'Jawahar', has the criterion
'a human being who is born to another human being'. Further
assume that the criterion of the concept 'son' has many
concepts which occur in it like 'having been born,' 'human,'
'one,' 'being,' 'another' and so on. Now I can produce a
number of meaningful sentences. "Jawahar is born," "Jawahar
is human," "Jawahar is a being." "Jawahar is one human being."
"Jawahar is another human being." "Jawahar is born human."

"Jawahar is a born being." "Jawahar is one born human being." "Jawahar is another born human being." And, I can have negative sentences of all these sentences which are meaningful. The list of all meaningful sentences involving the name 'Jawahar cannot be exhausted so easily, for we can go ahead in the same fashion by taking up the concepts which occur as the criteria of the concepts 'being,' 'born,' 'human' and so on. We can take the help of even concepts opposite of the concepts which are predicated of the name 'Jawahar' issuing in meaningful sentences. Their negations also will be meaningful sentences.

The justification of this explanation depends on the logic of criteria. The criterion of 'Jawahar' is that 'one who is the son of Moti Lal', therefore, we can replace 'one who is the son of Moti Lal', by 'Jawahar' in all the meaningful sentences in which this term occurs. If the name 'Jawahar' has one and only one criterion, then there will be no difference of meaning of the sentences, apart from that, there will be no difference in their truth values as well. Therefore, we can replace 'Jawahar' in all the meaningful sentences where 'one who is the son of Moti Lal' occurs and get name-concept sentence which is meaningful. The concept that occurs in the criterion of 'Jawahar' is 'son'. The concept 'son' must have its own symptom and criteria. In

all meaningful sentences in which a symptom or criterion of
the concept 'son' occur, we can replace it by the concept
'son' and get a meaningful sentence; and which can be
further replaced by the name 'Jawahar' yeilding a meaningful
sentence, but it need not be true.

The justification for the meaningfulness of all
negative sentences of all the above set of sentences is
based on the logic of negation. If X is a name and C is a
concept, and if we form a meaningful sentence "X is C", then
there are only two values that this can have. Either the
symptom or criterion of the concept 'C' is satisfied by the
name 'X', or is not. If in the sentence "X is C", X satisfies
the symptom and criterion of C, the sentence is true. If
the sentence "X is C" is true, then its negation "X is not C",
which says that X does not satisfy the criterion of C, will
be false.

The justification for opposite concepts also is
similar to that of negative sentence. The logic of opposite
concepts is such that if "X is married" is a meaningful
sentence where X is a name and 'marry' a concept, then the
sentence will have one of the truth values, and the sentence
"X is unmarried" will have the opposite truth value, for
the reason the concepts 'married' and 'unmarried' are opposite
concepts, and the sentence will be meaningful.

The charge of arguing in a circular way is not
unlikely to the justification of name-concept sentence-
meaning, which I have discussed here. But there is no real
circularity. A name will not remain a name unless its
criterion is a meaningful expression, because in that case
the expression will not help us in identifying the object
named. And then the justification shows why some name-
concept sentences are meaningful. With the help of truth
value, it proves why the negation of meaningful sentences
also must be meaningful. Finally it shows why sentences
with the opposite concepts also have to be meaningful.

## 4. Concept-Concept Sentence-Meaning:

Why such concept-concept sentences as "Games are
played for fun," "Games are a good form of excercise,"
"Playing games is a waste of time," "Games are discovered,
but not invented," etc. are meaningful? Why sentences as
"Games sit on chairs," "Games are black in colour," "Games
have a temperature of 180°C," etc. are meaningless? I will
limit my discussion only to the example of games and what
I say there on would be true of any meaningful/meaningless
concept-concept sentence.

The explanation of the meaningfulness of the first
set of sentences depend on the way one concept is related

to another.  The way one concept is related to another depends on their symptoms and criteria.  A symptom  of a concept might be the symptom of another concept; a symptom of one concept might be a criterion of another concept.  A criterion of one concept might be a criterion of another concept.  To put it symbolically: If C is a concept which has B as its symptom and X as its criterion, and if F is another concept with B as its symptom any Y as its criterion, and if P is a concept with A as its symptom and B as its criterion, and if R is a concept with A, B, as its symptoms, and X, Y, as its criteria, the way these four concepts are related will be: (1). A symptom of one concept is a symptom of another concept: the sentence "C is F" would then contain two concepts C and F and the way they are related is that both of them have the symptom B in common. (2). A symptom of a concept is the criterion of another concept; the sentence "C is P" would then contain two concepts C and P where the symptom of the concept C, i.e. B is a criterion of P. (3). A criterion of a concept is the criterion of another concept; the sentence "C is R"  would have two concepts C and R, and the criterion of C i.e. X, is also criterion of the concept R.

Let us find out all the meaningful sentences that can be formulated by making use of the concept 'game'. First

of all we have to find out the symptoms and criteria of the concept 'game'. We call an activity a game 'when there are two parties consisting of a definite number of players, following certain rules, where winning and loosing is involved, and all of the players are involved in the activity'. A criterion of the concept 'game' in a specific case may be playing with a ball'. There may be another criterion of game, where there are no two parties, but only one individual is playing without any rules, but still he is getting some exercise and enjoyment; e.g., the child playing with its doll. (There might be some more criteria, but these three will serve my purpose of discussion on the topic.) Two groups of persons in the play ground with hocky-stics are involved in some activities, this can be considered as a symptom of a play. Another symptom can be that all important news papers write about a certain game, e.g. that Pakistan has won the cricket match against India.

Now, we can have meaningful sentences in two ways by making use of the concept 'game'. One way is to use 'game' as a predicate in a name-concept sentence. For example, "Mr. X is playing a game". We have discussed why such sentences are meaningful. The other way is 'game' occurring in concept-concept sentences. There are two ways a concept can occur in a concept-concept sentence. In one case it

might be a predicate as in the example "Board games are games". There can also be other concepts which are predicated of this concept, e.g., "Games are meant for entertainment." But to the question why a sentence will be meaningful in which the concept 'game' occurs in a concept-concept sentence, the justification will be the same.

If the sentence "Foot ball game is a game" is meaningful, and similarly if "Volly ball game is a game" is meaningful, then we can have a concept of 'ball game'. And the concept 'ball game' has a criterion 'a game played with a ball'. And further the concept 'entertainment' functions as, if not as a criterion, then certainly as a symptom; hence we can have a meaningful concept-concept sentence "Games are meant for entertainment". Another symptom of the concept 'entertainment' is 'one which is a drama'. Therefore I can still have some more meaningful sentences like "Games are dramas" and "Dramas are games". As in the case with any meaningful sentence its negation also would be meaningful, and if we have opposite concepts then those sentences which make use of them will also be meaningful.

The justification of the theory of meaning of concept-concept sentences are based on the logic of symptom, and criteria. If any concept has some criteria, then in all the sentences wherever the criteria occur you can replace

the concept and get a meaningful sentence, otherwise the so-called criteria would not be functioning like criteria. This is true of symptoms also. And in all cases of the criteria of the concept which occurs in the criteria of this concept, we can replace the latter by the former and get meaningful sentences. The same justification can be extended to the sentences constructed on the basis of symptoms instead of criteria.

## 5. Metaphorical Sentence-Meaning:

Confining to the literal meaning of sentences may make us guilty of the charge that many poetic works would then turn out to be meaningless. But that we do understand the poems, enjoy poems, get inspirations from them etc., implies that the metaphorical and other figurative uses, eventhough they may commit category mistakes, they are meaningful. The truth of the matter is that the meaning of metaphorical sentences depends on the meaning of the corresponding literal sentences. One metaphor can have more than one corresponding literal sentence. In otherwords, there can be more than one literal translation of a metaphor, or simile or any figurative sentence whatsoever. All of such sentences together form the meaning of the metaphor involved.

On what basis do we translate a metaphor? Consider an example "Mr. X is a dog". Literally speaking this sentence has no meaning as it commits a category mistake. But this can be translated into such sentences "Mr. X is obedient." "Mr. X is a man whom if you feed well, he will no more create any problem". "The way Mr. X talks reminds us, of dogs." Now on what basis have I translated the metaphor into three literal sentences? In all these cases I have tried to find out a concept which has at least two symptoms or criteria when out of these two either one helps us to describe a man with the help of that concept, and another criterion or symptom helps us to describe any dog with the help of that concept. For example, we have the concept of 'obedience', which has one symptom 'one who is a human being' with the help of which we describe "Mr. X is obedient." ; and the other symptom of the concept 'obedience' is 'one which is a dog,' and with the help of this we describe 'dogs are obedient'. One reason why the metaphorical sentence "Mr. X is a dog" is meaningful is that the concept 'obedience' is predicable of a man, and a dog meaningfully. The other reason is the possibility of meaningful predicability of the concepts 'feeding well,' 'create problems' etc., which are both predicable of concept of 'man' and concept of 'dog' because of their symptoms and criteria.

In what way a sentence which commits a category
mistake is different from a metaphorical sentence? A sentence
which commits a category mistake has no criterion or symptom
commonly shared by the concept predicated and to which it is
predicated, whereas a metaphorical sentence has at least one
concept which can be meaningfully predicated of the concept
which is predicated, and of the one to which it is predicated
in the metaphor. Therefore, we can find metaphors which are
literally meaningless, but are metaphorically meaningful. The
same analysis holds good with similies and other figurative
uses.

There is a limitation for metaphorical and other
figurative uses of words. A metaphorical or figurative use
will not be translatable when we have no concept which can
be predicated of both the subject and predicate of a
metaphorical sentence, irrespective of whether the subject
is a name or a concept, and in such cases metaphorical
sentences will be meaningless, literally as well as figuratively.

6. Translatability:

Many dictionaries give words of a language which give
the same meaning as some words of a different language. A
lexicographer cannot manage to give the list of names with
their criteria, because it will run in volumes. It is a

linguistic accident if the spoken symbol of a name is one
and the same in different languages.  This has reduced the
lexicographer's burden.  He picks up only those words from
one language which are concepts associated with a linguistic
expression in the language, and he gives the linguistic
equivalents  of that concept in another language, which is
a word of the latter.  But this does not mean that we will be
able to translate each and every word of one language into
same word or wors of the other language.  It may happen that
the people of one region and religion have certain expressions
associated with some concepts, but we do not find the same
concepts in some other society.  Hence the question of
having an expression for such concept would  arise.  We may
invent new words in that language or  give criteria and
symptoms of the concept in terms of other, not exactly alike,
concepts.

Not only we translate words, we also translate sentences.
When we translate a sentence what we do is nothing but
translating the words of that sentence and then putting them
in a correct grammatical form by making use of grammatical
rule indicators in that language.

Why with a sentence translated into another sentence
of another language have the same meaning?  Perhaps this is
wrong question because if the translated sentence does not

have the same, or nearly the same, meaning, then it is not correct to call it a translation. Rather a translated sentence has to have the same conceptual relation with one another concept or name which is there in the original sentence, because of which the meaning of the sentence remains the same. The truth-values of the translated sentence also remains the same as those of the sentence translated, as they will be having the same conceptual or linguistic relation. If a concept is predicated of another concept, and the two concepts have one criterion in common in the original sentence in one language, then if it is translated properly into another language then the subject and predicate would have the same criterion or symptom in common. That is to say, they will have the same linguistic relations. For this reason if an argument is valid in one language, and if it is translated into another language, then also the argument will remain valid, provided the premises and the conclusion are translated correctly.

## 7. Truth:

We talk of statements or propositions being true or false. We do not speak of words being true or false, and literally we cannot talk of the truth of an object also. We say name-concept sentences are contingent statements which

may be true or false. Certain concept-concept sentences are true, and certain others are false. When we talk of 'true object,' what we mean is that many descriptions of that object are true.

The concept 'true,' like many other concepts, has many criteria. The way we find out the truth of a statement depends on the nature of the sentence expressing it. The criterion for the truth of a name-concept sentence is different from that of a concept-concept sentence, and also from a name-name sentence.

We have seen that there are three kinds of sentences i.e., name-name, name-concept, and concept-concept. An example of the first sort is "Chendrashekhar is Chandu", of the second sort "Chendrashekhar is a boy," and of the third sort "An occulist is an eye doctor". The reasons for these sentences to be true or false are different, and the test for their truth values are also different.

The truth of an identity-proposition depends on its criteria. In an identity-proposition there will be at least two names occuring, and if a criterion of the first is a criterion of the second or of the rest of the names, then the identity proposition is true, otherwise it is false. As the criterion of a name is a definite description, it

cannot be the case that a name has some criteria in common with another name, but not all.  In case they do not have any criterion, but a symptom in common, then the identity proposition is false.  If all the criteria of one name are the criteria of another also, then the sentence is true. To find out whether an identity proposition is true or false we need not have to go into a sort of verification; it is enough if we know that one criterion of a name is a criterion of another name.  There is no need of knowing about other criteria and symptoms of these names.  We can take it for granted that if two names have one criterion in common, then they have all criteria in common on the basis of the logic of definite descriptions and logic of names.

In the case of concept-concept sentence, we call a sentence true when all the criteria of subject concept are the criteria  of the predicate concept. For example, the sentence "Men are mortal" is true because all the criteria of the concept 'men' are the criteria of the concept 'mortal'; therefore, the sentence is true.  In the sentence "An occulist is an eye doctor",  all the criteria and symptoms of the concept 'occulist' are the criteria and symptoms of the concept 'an eye doctor'; therefore the sentence is true, and the concepts 'an occulist' and 'an eye doctor' synonymous. If it is the case that only one criterion or symptom is common

between two concepts, or if at least one criterion of the subject concept ( in the subject place) is not the criterion of the predicated concept, then the sentence is false. For the same reason the concept-concept sentence "Monkies are dangerous" is false, for we also find monkes which are not dangerous.

There are name-concept sentences like "Chendrashekhar is a boy". Such sentences are true when the name satisfies at least one criterion of the predicate concepts. But one cannot guarantee, eventhough it may be the case many times, that the sentence is true if the object named satisfies only some of the symptoms of the concept which is predicated of it. To test whether the object named satisfies the criterion of the concept predicated of it, we have to go for verification. If it is found that the object named satisfies a criterion of predicate concept, then the sentence is true, and if it does not satisfy a single criterion of the predicate concept, then the sentence is false, or meaningless. If the object named satisfies the symptoms, but not criteria of the predicate concept then the sentence is false. But if the object named does not satisfy any criterion or symptom of the predicate concept, then the sentence is meaningless, as it is committing a category mistake.

8. Necessary and Contingent Sentences:

"Bachelor is an unmarried male," "Occulist is an eye doctor," "A line is either straight or curved," "7 + 5 = 12," "Red objects are coloured" are considered to be good examples of necessary statements. Examples of statements which are contingent are "Monkies are sometimes dangerous," "Helping others is not always good," "Red apples are sweet," "Jawahar was white." Why do we call some statements necessary and some others contingent? What makes some statements necessary and some others contingent?

Looking into the meaning of sentences will not help us much, because both necessary and contingent statemments are meaningful. It is said that necessary statements are always true, but contingent statements are sometimes true and sometimes false. It is not obvious at least in the case of contingent statements. How can a statement be sometimes true and sometimes false without changing the concept? For example "Red apples are sweet" is a concept-concept sentence; according to criteriology either this sentence must be true or false. If we say that it is sometimes true and sometimes false then we can never determine the truth value of this statement. As it is a concept-concept sentence we must be in the position to find out the truth values of this sentence if we know how all the concepts that are used in the sentence

function.

Suppose we have then apples named X, Y and Z. I taste
them and say "X is red and sweet," "Y is red but not sweet"
and "Z is red and sweet". Have I not proved that "Red apples
are sweet" is sometimes true and sometimes false? The
argument is based on induction which is fallacious. What
I have at most proved is this: "X is an apple which is red
and sweet" is true, "Y is an apple which is red and sweet"
is false. And "Z is an apple which is red and sweet" is true.
From this I cannot establish the truth value of the sentence
"Red apples are sweet." And there are a number of instances
of apples which we have to be still observed. Any descriptive
statement cannot have both the truth values at the same time;
if it can happen so, both of them are not values of that
sentence. "Red objects are sweet" being a concept-concept
sentence, if I can give one instance of the concept 'red
apple' and its being not sweet, I have established the falsity
of the statement. This can be proved other way also, by doing
conceptual analysis. Find out the criteria of the concept
'red apple' and criteria of the concept 'sweet' and if and
only if we find that all the criteria of 'red apple' are
the criteria of 'sweet' then the sentence is true. But we
have only some symptoms of 'red apple' as some symptoms of
'sweet'; therefore it is not a necessary statement.

If a statement is not necessary then it does not follow that it is a contingent statement. Both are not mutually exhaustive. The above example "Red apples are sweet" is simply a false statement, and it can never be true; therefore it is not a contingent statement.

Consider the statement "Jawahar was the first Prime Minister of India". Is it necessary or contingent?(presupposing that the name Jawahar has more than one criterion). This is a true statement. Hence the question of its becoming false does not arise. I thus redefine contingency of a statement: A statement is contingent if it has the disposition to be true or false. The above statement "Jawahar was the first Prime Minister of India" is not contingent, is not even necessary, but only true. I define necessity of a statement: A statement is necessary if it has no disposition to be false.

## 9. Communication Break:

In a communication situation there will be a speaker and a listener, or there will be a writer and a reader. In any circumstances we do not speak to ourselves or communicate the thoughts to ourselves by writing it. There is no communication situation, for I cannot communicate to myself what I don't know, and the question of communication does not arise if I know about it already. But nevertheless a thing

which is known to others can be communicated by us to them.
It is unnecessary but not impossible.

Communication is possible only through the medium of
language. All languages including code languages are sign-
languages. There is no language which was discovered. Of
course we might discover a language's origin or development;
and that is different.

Communication break is possible when the speaker is
speaking a language which the listener does not know. That
we do not understand the language which we don't know is
quite obvious. And we also cannot know the meaning of
sentence if we do not know the words that are used in that
sentence. A listener might confuse a name with a concept,
and a concept with a name. For example, suppose Neeraja is
a name of a person and the listener does not know about him;
then there can be communication break, suppose simply the
speaker says in Kannada "Neeraja is thirsty." One who does
not know that Neeraja is name of a person would think that
the speaker is saying "A lotus is thirsty", and he might
take it to mean metaphorically "Something eventhough it is
in possession  the thing it desires most, it is not able
to satisfy itself,". Now here is a situation of communication
break. Further, a really metaphorical sentence in Kannada
"Neeraja is thirsty" might be taken by a listener to be a

name-concept sentence where in fact it is concept-concept sentence, and hence the speaker fails to communicate the thought. There are many ambiguous words which become many times the cause of communication break. If value-loaded words are used and the listener does not know that they are value-loaded, then he will be taking it in a literal sense, causing a communication break, as it happens in case of taking a metaphorical sentence as a literal sentence.

## 10. Meaningless Sentences:

All sentences which are not meaningful are meaningless. Meaningless sentences and meaningful sentences are exhaustive. There is no sentence which is neither meaningful nor meaningless. If we know the conditions of meaningful sentences, then any sentence which does not fulfil the conditions of meaningfulness will be meaningless.

There are certain criteria to determine whether a sentence is meaningless or not. They are: (1). Any sentence which commits a grammatical mistake will not be meaningful, for grammatical correctness is a necessary condition of any sentence being meaningful. (2). A sentence which commits a category mistake will not be a meaningful. Under category mistake we can talk of two kinds: (a). Treating a concept as a name or a name as a concept. For example, in "Redness

is sweet," the concept 'redness' has been treated as a name and said to have sweetness. This is a meaningless sentence. An example of treating a name as a concept is "Democracy is India." Here the name 'India' has been treated as a 'concept'; hence the sentence is meaningless. (b) This kind of meaninglessness can be of two sorts: (1). Name-concept sentence: "This table got married recently." The concept 'marry' cannot be predicated of an inanimate objects, but only of human beings. (2). Concept-concept sentence: "Circles are square roots" ! The concept 'square root' cannot be predicated of circles; it can be predicated of only numbers. These sentences also commit category mistakes. (3). Metaphors and other figurative uses, eventhough they commit category mistakes, if they are translatable into literally meaningful sentences, then they are meaningful, otherwise not. (4). If a sentence is self-contradictory, then it is meaningless. Self-contradiction can be of two types: (1). In a name-concept sentence, e.g., if I define point A as a point which is at the intersection of the straight lines BC and DE, then if I say "A is not a point at the intersection of the straight lines BC and DE," it is a self-contradictory sentence. (2). In a concept-concept sentence, for example, "Straight line is one which is curved," we have self-

contradiction if the concept 'straight' is an opposite
concept of 'curved.' The logic of opposite concepts is such
that if two concepts are opposite, then they cannot have
any symptom or criteria in common. Hence sentences associating
such concepts are meaningless.

# CHAPTER VI

## CRITERIOLOGICAL LOGIC

Why logic <u>should</u> be given the place which is given
to it? Why do we praise something which is logical, and
condemn something which is illogical? Logical criticisms
are considered to be very important, amongst other sorts of
criticisms. Why? What is logic? Where does it originate?
In reality? In human mind? The world appears to obey the
so called laws of thought (which are really laws of logic).
Human mind feels guilty if it any time goes against logic.

1. Origin of Logic:

First I would like to refer to the thesis that
reality obeys logic because of which human minds and language
obey logic, as they are also parts of reality. This view
remains a hypothesis, and no conclusive verification is
possible. One corrolary that follows from this is that we
know only a part of reality, therefore we know only a part
of logic. Further, if logic requires reality, then there
must be reality before logic; in that case we have to
presuppose a word which was prior to logic and not following
logic. In other words the world was not obeying any logic
earlier and only after the origin of logic it started obeying
logic. How could this be possible?

That logic is born out of the human mind, is an alternative thesis. Language has to obey logic if it is to function successfully in communication, because it is a human creation; man cannot think well if he thinks inconsistently, and therefore meaningful language which purports to express man's thinking satisfactorily must obey logic. The world appears to obey logic because we cannot properly think about it if we think in an inconsistent way which we would be doing if we flout logic. Whatever is perceivable is thinkable; therefore whatever is thinkable would include whatever perceivable also, and therefore our account of the perceivable would also have to obey logic.

Strawson writes:

> "One might ask first: Why bother to avoid inconsistency? What is wrong with contradicting yourself? There is nothing morally wrong about it. It may not even be entirely pointless. Suppose a man sets out to walk to a certain place; but, when he gets half-way there, turns round and comes back again. This may not be pointless. He may, after all, have wanted only exercise. But, from the point of view of a change of position, it is as if he had never set out. And so a man who contradicts himself may have succeeded in exercising his vocal chords. But from the point of view of imparting information, of communicating facts ( or falsehoods) it is as if he had never opened his mouth. He utters words, but does not say anything."[1]

---

1.  P.F. Strawson, *Introduction to Logical Theory*, (London: Methuen & Co. Ltd., 1974), p.2.

Why cannot a man who contradicts himself impart information? The answer is: The human mind cannot comprahend a pair of contradictory statements. But, why cannot a human mind think inconsistently? If human mind cannot think inconsistently, then it is very much regulated by the demand of consistency, which is a demand of logic. In one sense of 'think' and 'can' we can think inconsistently, but we cannot if we mean by 'think' thinking well.

We cannot think of a thing of which we have no conception. It is so for the reason that if we are thinking of a thing, say A, we are not thinking of some other thing, say B. That means we must be somehow differentiating A from other things; this we cannot do unless we have a conception of A. Prior to thinking, we must have somehow settled the criteria of a concept which applies to certain things and does not apply to certain other things; only then we can have a conception of the things conceived. To say this is to say that we have to have some criterion/ criteria to distinguish the things which belong to the category we think them as belonging to from the things belonging to another category which we exclude from thinking. It follows from this that we must already have had at least some conception, if not a clear conception of the things which we think about. To say that one must have some

conception is not to say that such conception is necessarily related to some word; therefore one man's conception can also be similar to somebody else's conception. In many cases we have a word for a concept. "Table," "chair," "student," etc., are the words for the concepts 'table,' 'chair,' 'student' etc. But in many cases we may not have any word for a concept. In that case we express such a concept by giving its criterion/criteria in a sentence or phrase. That will do if the need of the use of that concept is very much limited. But in many cases the concept concerned needs to be used quite often. In such cases we have to coin a handy term for it. For example, for the concept 'phrastic' Hare had, when he found the need of referring to it quite often, to coin a word "phrastic"[2] to effect linguistic economy and convenience. An unambiguous word is one which is associated with a definite, single, concept. But we cannot have one word for every concept since then we shall have too many words which will make handling them extremely difficult. Therefore pragmatically speaking we cannot coin new words for all the concepts we have, and at the same time we cannot do away with the concepts to which we have to refer quite often. There has to be some balance between the nature of concepts

---

2. Hare, R.M. The Language of Morals, ( London: Oxford University Press, 1975), p. 18.

applicable to not only a particular mind but to the majority
of minds, or mental phenomena.

F.H. Bradley has made a distinction between two
senses of idea[3]: the symbol and the symbolized or the image
and its meaning. He writes:

> "The ambiguity of "idea" may be exhibited thus.
> Thesis, On the one hand no possible idea can be
> that which it means. Antithesis, On the other
> hand no idea is anything but just what it means.
> In the thesis the idea is the psychological
> image; in the antithesis the idea is the logical
> signification. In the first it is the whole
> sign, but in the second it is nothing but the
> symbolized."[4]

Idea or the meaning "is neither given nor presented but is
taken. It can not ever be an event, with a place in the
series of time or space. It can be a fact no more inside
our heads than it can outside them."[5] It is clear "that the
idea, which we use as the predicate of a judgement, is not
my mental state as such. "The whale is a mammal" does not
qualify real whales by my mammal-image. For that belongs to
me, and is an event in my history."[6]

---

3. By the word "idea" he means concept.
4. F.H. Bradley, The Principles of Logic, ( London:
   University Press, 1958), Vol.I, pp. 6-7.
5. Ibid. p.7.
6. Ibid. p.8.

Every concept will be applicable to some objects. In otherwords for all concepts there must be objects which fall under that. To say that there can be a concept without any object falling under it amounts to saying that there can be concepts which are concepts of nothing. A concept has to be a concept of "...". But in all cases the objects which fall under it need not be existing objects. We can have a concept of an ideal triangle, but there exists no ideal triangle.

When do we say that a pair of two statements is inconsistent? It is considered that all pairs of contradictory statements are inconsistent. For example, "X is married and X is not married," is a contradictory pair and is also inconsistent. And all self-contradictory statements are also considered as inconsistent. For example, "An occulist is not an eye doctor." If we ask why "X is married and X is not married" is inconsistent, the answer is: At one and the same time, one and the same individual cannot be both married and not married. And if we ask why "An occulist is not an eye doctor" is self-contradictory? The answer is 'occulist' and 'eye doctor' are synonymous, and "eye doctor" can be replaced by "occulist" without changing the meaning and truth value of the sentence in which "eye doctor" occurs. Thus by replacing "eye doctor" by "occulist" in the above

sentence, we get the sentence "An occulist is not an occulist", and this is a clear cut example of self-contradictory statement. A self-contradictory statement is inconsistent because it is the denial of an appropriate identity proposition.

The question can be meaningfully further pressed: Why at the same time one and the same individual cannot be both 'married' and 'not married' ( or 'unmarried')? And why an 'occulist' need to be always an 'eye doctor'?

Any answer to the questions, "Why some statements are consistent?" and "Why some statements are inconsistent?" lead us beyond the principle of consistency.

Consistency and inconsistency are the results of the systematic use of the criteria of the concepts involved. If we use the word 'married' to some individual then at the same time we cannot use the phrase 'not married' to the same individual and vice versa. Nevertheless we can unsystematicall use a concept to some objects. When we combine in one sentence an appropriate and an inappropriate sentences, in some cases it results into inconsistent statements. All combinations of an appropriate and an inappropriate sentence will not result always into an inconsistent statement. Inconsistent statements arise only if we combine two or more statements

which have such a linguistic relationship among themselves that if one statement is appropriate, at least one of the others have to be inappropriate. Two statements can have a certain linguistic relationship only if the concepts used in those sentences have a certain linguistic relationship.

To have both consistent and inconsistent statements, we must have to use the criteria of the involved concepts systematically. For example, if I use the concepts 'married' and 'unmarried' according to their criteria, then these two concepts are opposite concepts and cannot be applied to the same object at the same time. If we presuppose that we are applying the criteria of the concepts 'married' and 'unmarried' systematically then we can have a consistent statement "X is married and X is not unmarried", and an inconsistent statement "X is married and X is unmarried". Suppose I use the concepts 'married' and 'unmarried' in a number of ways without following any systematic criterion; in that case 'married' and 'unmarried' will not have the same meaning which they now have, and will cease to have the conceptual relationship of being opposite concepts, and then the statement "A married man is unmarried" ceases to be meaningful sentence as the concepts used have no definite criteria. Therefore the question of the statement "A married man is unmarried" being consistent or inconsistent

does not arise.  Hence it is right to say that consistency
and inconsistency presuppose the systematic use of criteria
of the concepts involved. The _systematic_ _use_ of criteria of
concepts is neither consistency nor inconsistency as they
are not statements, but is rather regulated, or methodical,
use of the criteria.

The third alternative position is that logic is born
out of our use of language.  But then one may ask: Why is
there one logic underlying different languages?  The other
question would be: Why the world, including human mind, must
obey logic?

A concept does not belong to a particular language.
But every concept can be symbolised by a word in any language.
Thus concepts are linguistic in the sense that either they
are expressed by words in a language or they are potentially
expressible by words.  And the criteria of a concept can be
expressed in sentences which involve the use of some other
concepts.  All this is concerned with the question whether
concepts and names are linguistic or not, and whether their
criteria are linguistic or non-linguistic.  Concepts are
very much linguistic though they do not belong to any one
language; they can rather belong to any language.  Criteria
also do not belong to any one language, but they are very
much linguistic in the sense that they are in principle

always expressible in language. Thus, generally speaking, logic originates from language, but specifically speaking it originates from criteria. Let us see how this position can answer the questions which we have raised in the beginning of this section.

Why the world must obey logic? The world neither obeys logic nor disobeys it. It is non-logical. What obeys logic is our description of the world. Our concepts are such that some of the descriptions have to be true of certain things. For example, a line has to be either straight or curved. Our criteria of these two concepts (opposite concepts) 'straight' and 'curved' are such that one of these descriptions has to be true of a line. Therefore we think that the world obeys logic. But in fact it is the descriptions of the world which obey logic.

Why human mind obeys logic? In otherwords, why human mind is not happy when faced with two mutually inconsistent statements? Why are we not able to think of a line being curved and straight at the same time? Our conception of 'straight' and 'curved' are such that they are mutually exclusive; if a line satisfies the criterion of straightness then it is not satisfying the criterion of curvedness, and vice versa, for the reason that they have this sort of criteriological relationship. Therefore it is impossible for

us to think of any line which is both curved and straight; unless we change our concepts of 'straight' and 'curved' or have another concept of a line, we cannot.

Coming back to our question why something which is logical should be praised is this: That which is inconsistent will not be able to perform any linguistic act - the act of informing, communicating, commanding, requesting or exclaiming etc. Only that which is consistent is logical and meaningful and succeeds in performing any communicative act. Self-inconsistent sentences do not make any sense when taken together. From the point of view of human communication, that which serves the purpose for which it is meant has to be treated as superior to something else which does not. Anything which is logical is praised for this reason.

## 2. Logic of Values:

A sentence in principle belongs to a logic if it is possible for it to have any one of values of that logic. For example, a meaningless sentence cannot belong to truth functional two valued logic, just because it cannot have either of its two values 'true' or 'false'. A meaningless sentence is neither true nor false. If there is such a sentence, whose value is indeterminate, but still which can in principle be either true or false, then that sentence

belongs to two valued truth functional logic. But if there is such a sentence whose value is indeterminate, but which has no disposition to have any one of these two values, then that sentence does not belong to the two valued truth functional logic. Similarly if someone thinks of a three valued logic, then it becomes a must that any sentence that belongs to that logic must have the disposition to have any one of those three values.

3. Basic Values of Criteriological Logic:

Commands, exclamations, questions etc., are not parts of our two valued truth-functional propositional logic. The reason for this is that commands, exclamations, questions, etc., cannot have truth-values. Therefore truth-functional propositional logic excludes them even though they are meaningful. The values adopted by a logic determine the scope of that logic.

Criteriological logic, like the truth-functional logic, recognises only two values. Every compound and complex sentences can be broken into simple name-name, name-concept, or concept-concept sentences. I call something which satisfies or disatisfies the criterion of a concept the subject, and the concept whose criterion is satisfied or disatisfied I call predicate. In a name-name sentence the

names are both the subject and predicate in this sense, and
in a name-concept sentence a name will be the subject and
a concept the predicate. In the concept-concept sentence,
the concept which satisfies or disatisfies the criterion/
criteria will be the subject, and the other one will be the
predicate. The terms "subject" and "predicate" as used
here are stipulative; therefore there is no reason need to
be given for the senses in which I have used them.

I call a meaningful sentence appropriate if the
subject satisfies the criterion/criteria of the predicate,
and I call the sentence inappropriate if the subject does
not satisfy at least one criterion of the predicate. In
this sense a meaningful sentence has to be either appropriate
or inappropriate. Thus I recognize the two values of
criteriological logic, which are 'appropriate' and
'inappropriate'.

4. Scope of Criteriological Logic:

Name-name, name-concept and concept-concept sentences
exhaust the class of meaningful sentences; therefore the
scope of criteriological logic is unlimited. Any sentence,
if it is meaningful, is within the jurisdiction of
criteriological logic. Any sentence which is meaningful,
will have at least two parts, the subject and the predicate,

where either the subject will or will not satisfy the criterion/criteria of the predicate. Therefore any meaningful sentence, irrespective of whether it is a question, an indicative sentence, a command or an exclamation, it has to obey criteriological logic.  As the values of criteriological logic have a wider expansion, it can accomodate within itself truth-functional propositional logic, imperative logic and so on.

Descriptive statements in criteriological logic will have the values of appropriate/inappropriate, and a sentence which has the value 'appropriate' will have the value 'true' in truth-functional propositional logic while a descriptive statement which has the value 'inappropriate' in criteriological logic, will have the value 'false' in truth-functional propositional logic.

Commands  also can be interpreted as having the subject-predicate composition.  Commands are given or addressed to someone.  To whom it is addressed will be the subject and what he is commanded to do will be the predicate. For example, "Tell the truth," "Help the poor,"  these are commands in a context where we presuppose someone to whom these commands are issued, and the predicates in these cases are 'telling the truth,' and 'helping the poor.'  Commands also are either appropriate or inappropriate.  An appropriate command is one

which the person ( or the animal ) to whom the command is
issued is in a position to obey. For example, if I ask my
friend, "Help me in shifting my books", and he has no
justifiable reason for not helping me, then the command is
appropriate irrespective of the fact whether he actually
helps me or not. But if my friend is on the death bed, then
the command is inappropriate. If I command the table to
bring me a glass of water, then it is a meaningless command
as it commits a category mistake.

Bernard Mayo also talks of appropriateness and
inappropriateness of both descriptive statements and moral
judgements. He writes:

> "I shall suggest that there is a very general
> property of statements which I shall call
> appropriateness; that factual truth and moral
> 'truth' are each of them a special kind of
> appropriateness; and that appropriateness depends
> on the recognition of certain conventions or
> rules. More explicitly: to say that a statement
> is true ( or false) is to say that it is appropriate
> (or inappropriate) in one way, while to say that
> a moral judgement is sound is to say that it is
> appropriate in another way. Truth is not the
> only kind of appropriateness. But the appropriateness
> of anything is not a simple property which that
> thing just possesses, or a simple relation between
> one thing and another."[7]

---

7. Bernard Mayo, _Ethics And The Moral Life_, ( N.Y.: Mac
   Millan & Co. Ltd., 1958), p.74.

And further Bernard Mayo rightly makes the remark "... we call statements true which we accept, and false which we reject. We accept and reject statements because they satisfy or fail to satisfy the criteria which we apply in testing certain linguistic performances, namely assertions."[8] While talking about moral judgements he says unlike statements:

> "There is not, if what we want is a conventional correlation between type of assertion and type of situation. There is no correspondence theory of truth for moral discourse. We cannot deal with singular moral judgment in isolation, out only by affiliating them to the general principles from which they are derived and on which they rely for their support. 'It was wrong to torture that prisoner' depends on the general principle that torturing is wrong."[9]

By giving the criteria of appropriateness of moral judgement he writes:

> "The rule in accordance with which I abstain from theft, the rule in accordance with which I condemn another's act of theft, or the mine, and the rule in accordance with which I either pronounce a singular moral verdict, or enunciate a general moral judgement about thieving, are one and the same rule. Such rules are the criteria of correctness in moral discourse, as truth-criteria are in factual discourse."[10]

---

8. Ibid. p. 73.
9. Ibid. pp. 80-81.
10. Ibid. p. 82.

I agree with Mayo on one point that both statements and moral judgements can have the value 'appropriate' or 'inappropriate'. But I differ with him as to why a particular statement or moral judgement is appropriate or inappropriate. He recommends that there must be some distinct criteria to judge the appropriateness or inappropriateness of a singular or general statement. But I hold the view that the same criterion/criteria of the predicate concept ( or name as the case may be) can be used to judge appropriateness or inappropriateness of singular or general statements which have the same predicate concept ( or name as the case may be). Mayo's theory has to face the problem of providing distinct criteria of innumerable statements which can be made out of limited words. Regarding moral judgements he holds the view that there must be general principle at the back of each singular moral judgement. But I hold the view that it is the criterion/criteria of the predicate concept that makes it possible to judge the appropriateness/inappropriateness of the moral judgements. Mayo holds the view that the way we test the appropriateness or inappropriateness of statements and moral judgements are different, whereas, I hold the view that the way we determine appropriateness or inappropriateness is exactly the same in both the cases, eventhough criterion/criteria differ wherever the predicate concepts differ.

How can questions have the subject predicate form?
Consider some examples, "What is your name?," "What are you
doing?," and "What are the characteristics of democracy?"
In all these questions there are some grammatical indicators
because of which we know that these sentences are questions.
In the spoken form, the way the words are arranged, the
occurence of words like "what," "why," "which," "whom" etc.,
in the beginning of the sentence and the tone of the
utterance of the sentence, etc., indicate that it is a
question. In the written form the tone of the sentence is
replaced by the mark "?". Besides its grammatical features
the other constituents of a question are names or/and
concepts. The question "What are you doing?" means "What
action is it which you are doing?," "What is your name?"
means "What is the name which you have?" and "What are the
characteristics of democracy?" means "What are the
characteristics which are the characteristics of democracy?"
The subject of a question is that about which the question
is asked. In the above examples, in the case of first two
questions the name of the person to whom the question is
asked is the subject, and in the third case "democracy" is
the subject of the question. The predicate of a question
is that which is asked of the subject. In the above examples
"what name," "what doing," "what characteristic" etc., are

the predicates. Some people are likely to think that there are only two kinds of questions: meaningful and meaningless. For them all questions which are meaningful are appropriate, and all questions which are meaningless are inappropriate. I hold the view that all inappropriate questions need not be meaningless. If a citizen of India asks the question "Why should I pay tax?" knowing fully well that income tax rule is constitutional and he is a citizen of India because of which he is abide by the rules of the Indian Government, then it is an inappropriate question irrespective of what answer he gets from others to this question. Meaningless questions are those which commit some category mistake. If I ask "What is the weight of a triangle?", it would be meaningless question as triangles are not the things which can have any weight. If I ask a student "Why are you not studying now a days?", it is an appropriate question if he used to study earlier and does not study now a days.

Exclamations also can be interpreted as having subject-predicate form. Suppose I say "How beautiful the flower is!" Analogous to commands and questions the subject is that about which we exclaim and the predicate is that which is exclaimed of the subject. It is quite possible

that the concept of 'beautiful flower' differs much from person to person because of which the same flower might be beautiful to someone and not to someone else. If the subject satisfies the criterion/criteria of the predicate-concept, then the exclamation is appropriate, otherwise it is inappropriate if it is meaningful. An exclamation which commits a category mistake will be meaningless.

# SELECTED BIBLIOGRAPHY

Books

Aaron, R.I. The Theory of Universals, Oxford: The Clarendon Press, 1952.

Alston, W.P. Philosophy of Language, Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965.

Ammerman, R. Classics of Analytic Philosophy, New York: MacGrow-Hill, 1965.

Austine, J.L. How to do Things with Words, Oxford: Clarendon Press, 1962.

_____ Philosophical Papers, Oxford: Clarendon Press, 1961.

_____ Sense and Sensibilia, Oxford: Oxford University Press, 1962.

Ayer, A.J. Language Truth and Logic, 2nd ed., London: Gollancz, 1946.

_____ (ed.). Logical Positivism, London: Allen and Unwin, 1959.

_____ (ed.). Philosophical Analysis, Ithaca, N.Y.: Cornell University Press, 1954.

Black, M. Language and Philosophy, Ithaca, N.Y.: Cornell University Press, 1950.

_____ (ed.). Philosophy in America, London: Allen and Unwin, 1965.

_____ (ed.). Philosophical Analysis, New York: Cornell University Press, 1950.

Bloch, B. and G.L. Trager. Outline of Linguistic Analysis, Baltimore: Linguistic Society of America, 1942.

Bloomfield, L. Language, New York: Holt, 1933.

Bradley, F.H. The Principles of Logic, Vol. I. London: Oxford University Press, 1958.

Butler, R.J. (ed.). Analytical Philosophy, Oxford: Basil
       Blackwell & Mott, Ltd., 1962.

Carnap, R. The Logical Syntax of Language, New York:
       Harcourt Brace, 1937.

_____ Meaning and Necessity, Chicago: University of
       Chicago Press, 1947.

Caton, C.E. (ed.). Philosophy and Ordinary Language, Urbana:
       University of Illinois Press, 1963.

Chappel, V.C. (ed.). The Philosophy of Mind, Englewood Cliff,
       N.J.: Prentice-Hall, 1962.

Chisholm, Roderic M. (ed.). Realism and the Background of
       Phenomenology, Glencoe, Illinois: Free Press, 1960.

Cohen, L.J. The Diversity of Meaning, New York: Herder and
       Herder, 1963.

Copi, I.M. and J.A.Gold. (ed.). Contemporary Readings in
       Logical Theory, New York: Macmillan, 1967.

Feigl, H. and W.Sellars (eds.). Readings in Philosophical
       Analysis, New York: Appleton-Century-Crofts, 1949.

Findlay, J.N. Meinong's Theory of Objects and Values, 2nd ed.
       Oxford: Clarendon Press, 1963.

Flew, A.G.N. (ed.). Essays in Conceptual Analysis, London:
       Macmillan, 1956.

_____ (ed.). Logic and Language, First Series, Oxford:
       Blackwell, 1951.

_____ (ed.). Logic and Language, Second Series, Oxford:
       Blackwell, 1953.

Fodor, J. and Katz, J. (eds.). Readings in the Philosophy
       of Language, Englewood Cliffs, N.Y.: Prentice-Hall,
       1963.

Frege, G. Philosophical Writings, trans. P.T. Geach and M.
       Black, Oxford: Blackwell, 1952.

Geach, P.T. <u>Reference and Generality</u>, New York: Cornell
University Press,

Hare, R.M. <u>The Language of Morals</u>, London: Oxford University
Press, 1975.

Hospers, J. <u>An Introduction to Philosophical Analysis</u>, Bombay:
Allied Publishers Private Ltd., 1971.

Kneale, W.C. and Martha Kneale. <u>The Development of Logic</u>,
Oxford: Clarendon Press, 1962.

Lewis, H.D. <u>Contemporary British Philosophy</u>, Third Series,
London: George Allen & Unwin, 1956.

Linsky, L. (ed.). <u>Semantics and the Philosophy of Language</u>,
Urbana: University of Illinois Press, 1952.

Macdonald, Margaret, (ed.). <u>Philosophy and Analysis</u>, Oxford:
Blackwell, 1954.

Mace, C.A. (ed.). <u>British Philosophy in the Mid-Century</u>,
London: George Allen & Unwin, 1957.

Malcolm, N. <u>Dreaming</u>, London: Routledge and Kegan Paul, 1957.

Mayo, B. <u>Ethics and the Moral Life</u>, London: Macmillan & Co.
Ltd., 1958.

Mill, J.S. <u>A System of Logic</u>, London: Longmans, Green & Co.
Ltd., 1965.

Moore, G.E. <u>Philosophical Papers</u>, London: George Allen &
Unwin, 1959.

_____ <u>Some Main Problems of Philosophy</u>, New York:
Macmillan, 1953.

Pap, A. <u>Semantics and Necessary Truth</u>, New Heven, Cann. :
Yale University Press, 1958.

Passmore, J.A. <u>Philosophical Reasoning</u>, London: Duck Worth,
1961.

Pitcher, G.W. (ed.). <u>Truth</u>, Englewood Cliff, N.J.: Prentice-
Hall, 1964.

_____ (ed.). <u>Wittgenstein</u>, New York: Doubleday & Company,
I.N.C. 1966.

Quine, W.V. <u>From a Logical Point of View</u>, Cambridge: Harvard University Press, 1961.

_____ <u>Word and Object</u>, Cambridge, Mass: The M.I.T.Press, 1960.

Rosenberg, J.F. and C. Travis (ed.). <u>Readings in the Philosophy of Language</u>, Englewood Cliffs, N.J.: Prentice-Hall Inc. 1971.

Russell, B. <u>Logical Knowledge</u>, ed. by R.C.Marsh, London: The Macmillan Company, 1964.

Ryle, G. <u>The Concept of Mind</u>, New York: Penguin Books, 1976

Searle, J.R. <u>Speech Acts</u>, Cambridge: Cambridge University Press, 1970.

Shoemaker, S. <u>Self-Knowledge and Self-Identity</u>, Ithaca: Cornell University Press, 1963.

Strawson, P.F. <u>Individuals</u>, London: Methuen & Co. Ltd., 1974.

_____ <u>Introduction to Logical Theory</u>, London: Methuen & Co. Ltd., 1974.

_____ (ed.). <u>Philosophical Logic</u>, London: Oxford University Press, 1967.

Urmson, J.O. <u>Philosophical Analysis</u>, Oxford: Clarendon Press, 1956.

Williams, B.A.O. and A.C.Montefiore (ed.). <u>British Analytical Philosophy</u>, London: Routledge and Kegan Paul, 1966.

Winch, P. (ed.). <u>Studies in the Philosophy of Wittgenstein</u>, London: Routledge and Kegan Paul, 1969.

Wisdom, John, <u>Other Minds</u>, Oxford: Blackwell, 1953.

Wittgenstein, L. <u>The Blue and Brown Books</u>, New York: Harper Torchbooks, 1965.

_____ <u>Philosophical Investigations</u>, trans. by G.E.M. Anscombe, New York: The Macmillan Company, 1968.

_____ <u>Tractatus Logico-Philosophicus</u>, trans. Pears and McGuinnes, London: Routledge and Kegan Paul, 1961.

Articles

Aaron, R.I.,   'Two Senses of the Word Universal,' <u>Mind</u>, 48
   (1939).

_____   'Wittgenstein's Theory of Universals,' <u>Mind</u>, 73
   (1964).

Albritton, R.,   'On Wittgenstein's Use of the Term 'Criterion','
   <u>The Journal of Philosophy</u>, LVI (1959).

Baier, K.,   'Contradiction and Absurdity,' <u>Analysis</u>, 15 (1954).

_____   'The Ordinary Use of Words,' <u>Proceedings of the
   Aristotelian Society</u>, LII (1952).

Bambrough, J.R.,   'Universals and Family Resemblances,'
   <u>Proceedings of Aristotelian Society</u>, LXI (1960-61).

Batch, K.,   'A Criterion for Toothache?,' <u>Philosophical</u>
   Studies, Vol. 19 (1968).

Baylis, C.A.,   'Universals, Communicable Knowledge and
   Metaphysics,' <u>The Journal of Philosophy</u>, 48 (1951).

Berlin, I.,   'Logical Translation,' <u>Proceedings of the
   Aristotelian Society</u>, L (1950).

Black, M.,   'Definition, Presupposition, and Assertion,' <u>The
   Philosophical Review</u>, LXI (1952).

_____   'Necessary Statements and Rules,' <u>Philosophical
   Review</u>, LXVII (1958).

_____   'Notes on the Meaning of 'Rule',' <u>Theoria</u>, XXIV
   (1958).

_____   'The Semantic Definition of Truth,' <u>Analysis</u>, 8
   (1948).

Bousma, O.K.,   'Russell's Argument on Universals,' <u>An</u>
   Philosophical Review, Vol. 52, (1943).

Caldwell, R.L.,   'Malcolm and the Criterion of Sleep,'
   <u>Australasian Journal of Philosophy</u>, Vol. 43 (1965).

Cameron, J.R.,   'Sentence Meaning and Speech Acts,' <u>Philosophical</u>
   Quarterly, 20 (1970).

Campbell, K., 'Family Resemblance Predicates,' _American Philosophical Quarterly_, II (1965).

Campbell, R., 'Proper Names,' _Mind_, 77 (1968).

Canfield, J.V., 'Criteria and Rules of Language,' _The Philosophical Review_, Vol. LXXIII (1974).

Casteneda, H., 'Criteria, Analogy and Knowledge of Other Minds,' _The Journal of Philosophy_, Vol. 59 (1962).

Carnap, R., 'Testability and Meaning,' _Philosophy of Science_ (1936).

Carney, J.D., 'Fictional Names,' _Philosophical Studies_, Vol. 32 (1977).

Cavell, S., 'Must We Mean What We Say?,' _Inquiry_, I (1958).

Cawan, J.L., 'Wittgenstein's Philosophy of Logic,' _The Philosophical Review_, LXX (1961).

Chihara, C.S. and Fodor J.A., 'Operationalism and Ordinary Language; A Critique of Wittgenstein,' _American Philosophical Quarterly_, Vol. II (1965).

Chisholm, R., 'Intentionality and the Theory of Signs,' _Philosophical Studies_, III (1952).

Coburn, R.C., 'Persons and Psychological Concepts,' _American Philosophical Quarterly_, Vol. 4 (1967).

Cohen, L.J., 'Do Illocutionary Forces Exist?,' _Philosophical Quarterly_ (1964).

Connor, D.J.O., 'Incompatible Properties,' _Analysis_, XV (1954).

Covel, S.C., 'Persons and Criteria in Strawson,' _Philosophy and Phenomenological Research_, Vol. 24 (1963-64).

Dewey, J., 'Characteristics and Characters: Kinds and Classes,' _The Journal of Philosophy_, 33 (1936).

Dolby, R.G.A., 'Philosophy and the Incompatibility of Colours,' _Analysis_, 33 (1973).

Donnellan, 'Reference and Definite Descriptions,' _Philosophical Review_ (1966).

English, J., 'Partial Interpretation and Meaning Change,' The Journal of Philosophy, Vol. LXXV, (1978).

Evans, J.L., 'On Meaning and Verification,' Mind, LXII (1953).

Ewing, A.C., 'The Linguistic Theory of A Priori Propositions,' Proceedings of the Aristotelian Society (1939-40).

_____ 'The Problem of Universals,' The Philosophical Quarterly, 21 (1971).

Feyerabend, P.K., 'Wittgenstein's Philosophical Investigations,' Philosophical Review, LXIV (1955).

Findley, J.N., 'Use Usage and Meaning,' Proceedings of the Aristotelian Society, Supplementary, Vol. 35 (1961).

Fitch, F.B., 'The Problem of the Morning Star and the Evening Star,' Philosophy of Science (1949).

Fodor, J., 'Of Words and Uses,' Inquiry, IV (1961).

_____ 'What Do You Mean?,' The Journal of Philosophy, LVII (1960).

_____ and Katz, J., 'What is Wrong with the Philosophy of Language,' Inquiry, V (1962).

Frege, G., 'On Concept and Object,' trans. P.T. Geach, Mind, Vol. 60 (1951).

Garner, R., 'On the Use of Proper Names and Definite Descriptions,' Philosophical Quarterly, 19 (1969).

Garver, N., 'Wittgenstein on Criteria,' (Symposium), in C.D. Rollins (ed.), Knowledge and Experience, Pittsburgh: University of Pittsburgh Press, (1962).

_____ 'Criterion of Personal Identity,' The Journal of Philosophy,' Vol. 61 (1964).

Geach, P.T., 'Class and Concepts,' The Philosophical Review, 64 (1955).

_____ 'Russell's Theory of Descriptions,' Analysis, 10 (1950).

_____ 'Subject and Predicate,' Mind, LIX (1950).

Grice, H.P., 'Meaning,' Philosophical Review, LXVI (1957).

Grimm, R.H., 'Names and Predicables,' Analysis, 26 (1965).

Hamblin, C.L., 'Questions,' Australasian Journal of Philosophy, 36 (1958).

Hampshire, S., 'Are All Philosophical Questions Questions of Language?,' Proceedings of Aristotelian Society, Supplementary (1948).

_____ 'On Referring and Intending,' The Philosophical Review, LXV (1956).

Hare, R.M., 'Meaning and Speech Acts,' Philosophical Review, 78 (1969).

Harre, R., 'Concept and Criteria,' Mind, Vol. 73 (1964).

Hart, H.L.A., 'A Logician's Fairy Tale,' Philosophical Review, LX (1951).

Hempel, C.G., 'The Concept of Cognitive Significance: A Reconsideration,' Proceedings of American Academy of Arts and Sciences, (1951).

Hungerland, I.C., 'Contextual Implication,' Inquiry III (1960).

Hunter, J., 'Wittgenstein on Inner Processes and Outward Criteria,' Canadian Journal of Philosophy, Vol. VII (1977).

Iseminger, G., 'Meaning, Criteria, and P-Predicates,' Analysis, Vol. 24 (1963-64).

Johnston, P., 'Origin and Necessity,' Philosophical Studies, Vol. 32 (1977).

Kenny, A., 'Criterion,' in P. Edwards (ed.), The Encyclopedia of Philosophy, New York: Macmillan, 1967.

Koethe, J.L., 'The Role of Criteria in Wittgenstein's Later Philosophy,' Canadian Journal of Philosophy, Vol. 7 (1977).

Krwan, C., 'On the Connotation and Sense of Proper Names,' Mind, 77 (1968).

Kultgen, J.H., 'Universals, Particulars and Change,' Metaphysics, 9 (1955).

Kyburg, H.E., 'All Acceptable Generalizations are Analytic,' American Philosophical Quarterly, Vol. 14 (1977).

Lanford, C.H., 'On Propositions Belonging to Logic,' Mind, (1927).

Lemmon, E.J., 'On Sentences Verifiable by Their Use,' Analysis, 22 (1962).

Levison, A.B., 'Wittgenstein and Logical Laws,' Philosophical Quarterly, XIV (1964).

Linsky, L., 'Wittgenstein on Language and Some Problems of Philosophy,' The Journal of Philosophy, Vol. 54 (1957).

Lockwood, M., 'On Predicating Proper Names,' Philosophical Review, LXXXIV (1975).

Lycan, W.G., 'Non Inductive Evidence: Recent Work on Wittgenstein's 'Criteria',' American Philosophical Quarterly, Vol.8 (1971).

MacIver, A.M., 'Demonstrative and Proper Names,' Analysis, 3 (1935).

Mackay, A.F., 'Attributive Predicate,' Analysis, 30 (1970)

McKinsey, M., 'Searle On Proper Names,' Philosophical Review, 80 (1971).

Malcolm, N., 'Certainty and Empirical Statements,' Mind LI (1942).

_____ 'Defending Common Sense,' Philosophical Review, LVIII (1949).

_____ 'Knowledge and Belief,' in Knowledge and Certainty, Englewood Cliffs: Prentice-Hall, (1963).

_____ 'Knowledge of Other Minds,' The Journal of Philosophy, LV (1958).

_____ 'Wittgenstein's Philosophical Investigations,' in Knowledge and Certainty, Englewood Cliffs: Prentice-Hall, (1963).

Margolis, J., 'The Problem of Criteria of Pain,' _Dialogue_, Vol. 4 (1965).

Martin, R.M., 'On 'analytic',' _Philosophical Studies_, (1952).

Martinich, A.P., 'The Attributive use of Proper Names,' _Analysis_ (1977).

Mayo, B., ''Rules' of Language,' _Philosophical Studies_, II (1951).

Midgley, G.C.J., 'Linguistic Rules and Language Habits,' _Proceedings of Aristotelian Society, Supplementary_, XXIX (1955).

Moore G.E., 'Imaginary Objects,' _Aristotelian Society Proceedings, Supplementary_, 12 (1933).

Moore, J.S., 'Why a Realism of Universals?,' _The Journal of Philosophy_, Vol. 36 (1939).

Muirhead, J.H., 'The Plan of Concept in Logical Doctrine,' _Mind_, 5 (1896).

Mundle, C.W.K., 'Mental Concepts,' _Mind_, Vol. 72 (1963).

Nammour, J., 'Resemblances and Universals,' _Mind_, LXXXII (1973).

Nehamas, A., 'Confusing Universals and Particulars in Plato's Early Dialogue,' _Metaphysics_, XXIX (1975).

Pap, A., 'Types and Meaninglessness,' _Mind_,(1960).

Passmore, J., 'Professor Ryle's Use of 'Use' and 'Usage',' _Philosophical Review_, LXIII (1954).

Pears, D.F., 'Universals,' _Philosophical Quarterly_, 1 (1950).

Pollock, J.L., 'Criteria and Our Knowledge of the Material World,' _The Philosophical Review_, Vol. 76 (1967).

Prall, W.W., 'Essences and Universals,' _The Journal of Philosophy_, 22 (1925).

Putnam, H., 'The Analytic and the Synthetic,' _Minnesota Studies in the Philosophy of Science_, Vol. III, (Minneapolis: University of Minnesota Press, 1962).

Putnam, H., 'Meaning and Reference,' Journal of Philosophy, (1973).

_____ 'Psychological Concepts, Explication, and Ordinary Language,' The Journal of Philosophy, Vol. 54 (1957).

Ramsy, F.P., 'Universals,' Mind, 34 (1925).

_____ 'Universals and 'Method of Analysis',' Aristotelian Society Proceedings Supplementary, 6 (1926).

Russell, B., 'On Denoting,' Mind, (1905).

_____ 'On the Relation of Universals and Particulars,' Proceedings of Aristotelian Society, 12 (1912).

_____ 'The Philosophy of Logical Atomism,' Monist, (1918).

Ryle, G., 'Categories,' Proceedings of Aristotelian Society, XXXVIII (1938).

_____ 'Imaginary Objects,' Aristotelian Society Proceedings Supplementary, 12 (1933).

_____ 'Meaning and Necessity,' Philosophy, XXIV (1949).

_____ 'Use Usage and Meaning,' Proceedings of the Aristotelian Society, Supplementary, Vol.35 (1961).

Schwyzer, H., 'Rules and Practices,' The Philosophical Review, Vol. 78 (1969).

Scriven, M., 'The Logic of Criteria,' The Journal of Philosophy, Vol.LVI (1959).

Scruton, R., 'Truth Conditions and Criteria,' The Aristotelian Society, Supplementary, Vol. 50 (1976).

Searle, J.R., 'Meaning and Speech-Acts,' Philosophical Review (1962).

_____ 'Proper Names,' Mind, 67 (1958).

Shwayder, D.S., 'Uses of Language and Uses of Words,' Theoria, XXVI (1960).

Sinisi, V.F., 'Nominalism and Common Names,' _Philosophical Review_, 71 (1962).

Slote, M.A., 'Empirical Certainty and the Theory of Important Criteria,' _Inquiry_, Vol. 10 (1967).

_____ 'The Theory of Important Criteria,' _The Journal of Philosophy_, Vol. 63 (1966).

Smith, G.W., 'The Concepts of the Skeptic,' _Philosophy_, 49 (1974).

Stewart, C., 'Existence and the Use of Proper Names,' _Analysis_, 28 (1967-68).

Strawson, P.F., 'Intention and Convention in Speech-Acts,' _Philosophical Review_ (1964).

_____ 'Proper Names,' _Aristotelian Society Proceedings Supplimentary_, 33 (1957).

_____ 'Truth,' _Analysis_, 9 (1949).

Stroud, B., 'Wittgenstein and Logical Necessity,' _The Philosophical Review_, LXXIV (1965).

Tarski, A., 'The Semantic Conception of Truth and the Foundations of Semantics,' _Philosophy and Phenomenological Research_ (1944).

Taylor, D.M., 'Meaning and the Use of Words,' _Philosophical Quarterly_, 17 (1967).

Teichmann, J., 'Universals and Common Properties,' _Analysis_, 29 (1968-69).

Thomson, J.F., 'A Note on Truth,' _Analysis_, (1949).

Thomson, M., 'Abstract Entities and Universals,' _Mind_, 73 (1964).

_____ 'On the Elimination of Singular Terms,' _Mind_, 68 (1959).

Tyler, B., 'Reference and Proper Names,' _Journal of Philosophy_, LXX (1973).

Walterstorff, N., 'Referring and Existing,' _The Philosophical Quarterly_, 11 (1961).

Wornock, G.J., 'Claims to Knowledge,' (Section II),
          Proceedings of the Aristotelian Society, Supplementary
          Vol. (1962).

_____ 'Verification and the Use of Language,' Revue
          Internationale de Philosophie, 5 (1951).

Wellman, C., 'Our Criteria for Third-Person Psychological
          Sentences,' The Journal of Philosophy, Vol.58 (1961).

_____ 'Wittgenstein's Conception of a Criterion,'
          The Philosophical Review, Vol. LXXI, (1962).

White, A.R., 'Synonymous Expressions,' The Philosophical
          Quarterly, 8 (1958).

Wilson, Mary, 'The Problem Between Use and Meaning,' Analysis,
          X (1950).

Wolfe, J., 'The Criteria of Sleep,' Theoria, Vol.34 (1968).

Wolgast, S.H., 'Wittgenstein and Criteria,' Inquiry, Vol. 7
          (1964).

Wood, Ledger, 'Concepts and Objects,' The Philosophical
          Review, Vol. 45 (1936).

Wood, O.P., 'The Force of Linguistic Rules,' Proceedings of the
          Aristotelian Society, LI (1951).

Whiteley, C.H., 'Phenomenolism,' in A Modern Introduction to
          Philosophy, Paul Edwards and Arthur Pap, New York:
          The Free Press, 1968.

Zemach, E.M., 'Personal Identity without Criteria,'
          Australasian Journal of Philosophy, Vol. 47 (1969).

Zink, S., 'The Meaning of Proper Names,' Mind, 72 (1963).